DEPARTMENT OF THE NAVY - SOUTHWEST DIVISION Naval Facilities Engineering Command



REMEDIAL EXCAVATION/ CLOSURE REPORT

FORMER UST 41319 MARINE CORPS BASE CAMP PENDLETON, CALIFORNIA

FEBRUARY 2005

Prepared by: Navy Public Works Center San Diego Work Request No. XFG95L



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Acronyms and Abbreviations

AC/S ES	Assistant Chief of Staff, Environmental Security	PCBs PRG	Polychlorinated biphenyls Preliminary Remediation Goal
bgs	Below ground surface	PWCSD	Navy Public Works Center San Diego
BTEX	Benzene, toluene, ethylbenzene and total xylenes	RAWP	Remedial Action Work Plan
CHs COC	Chlorinated hydrocarbons Chain-of –Custody	SPLP	Synthetic Precipitation Leaching
DEH	San Diego County Department of Environmental Health	SWDIV	Procedure Naval Facilities Engineering
DHS	California Department of Health Services	TPH-d	Command Southwest Division Total petroleum hydrocarbons,
ESA	Environmental Site Assessment	TPH-g	diesel Total petroleum hydrocarbons,
FWEC	Foster Wheeler Environmental Corporation	ТРН-о	gasoline Total petroleum hydrocarbons,
GPS	Global positioning system		motor oil
IDW LUFT	Investigation-Derived Waste Leaking Underground Fuel Tank	TRPH	Total recoverable petroleum hydrocarbons
	Manual	UST	Underground Storage Tank
MCBCP MEI mg/kg	Marine Corps Base Camp Pendleton Minority Enterprises, Inc Milligram per kilogram	Yd ³	Cubic yards
MSL	Mean sea level		

1.0 INTRODUCTION

This report presents the results of a remedial excavation of hydrocarbon-impacted soil conducted by the Navy Public Works Center San Diego Environmental Department (PWCSD) at Former Building 41319, Marine Corps Base (MCB) Camp Pendleton, California (Figures 1-1, 1-2). The remedial excavation was conducted under Naval Facilities Engineering Command, Southwest Division (SWDIV) Work Request Number XFG95L.

Sampling and analysis activities were conducted in accordance with the Remedial Action Work Plan (RAWP) (PWCSD, 2004). The RAWP was reviewed by, and received concurrence from, the California Regional Water Quality Control Board, San Diego Region (RWQCB).

1.1 Objectives

The primary objectives of this remedial excavation were to:

- Meet the internal objectives of MCB Camp Pendleton for reduced potential risk to hypothetical construction workers at the site;
- Meet the requirements of the California Regional Water Quality Control Board (RWQCB) and San Diego County Department of Environmental Health (DEH);
- Obtain regulatory concurrence with a recommendation for site closure with no further action upon attaining soil cleanup goals to the extent practical.

1.2 Scope of Work

To meet project objectives, the scope of work included the following elements:

- Review of available environmental site assessment data and published geologic literature;
- Preparation of the RAWP, and supporting site-specific Worker Health and Safety Plan;
- Excavation and disposal of hydrocarbon-impacted soil, estimated at 275 cubic yards (yd3) of soil;
- Collection and analysis of confirmation soil samples;
- Restoration of the site to its original design; and
- Presentation of results, interpretation, conclusions, and recommendations in this Remedial Excavation /Closure Report.

2.0 BACKGROUND

This section presents information on site history, previous investigations, regional and site geology and hydrogeology, and proposed cleanup goals.

2.1 Site Description

The site is a decommissioned (date unknown) vehicle grease rack underground storage tank (UST) located on the north side of El Camino Real approximately 350 feet west of Fisher Road in the 41 Area. The site is at an approximate elevation of 120 feet above mean sea level (msl). UST Site 41319 is shown with nearby Area 41 buildings in Figure 1-2. UST 41319 was a 2,000-gallon waste oil tank, which was removed in 1994 by Minority Enterprises, Inc. (MEI, 1994).

Site Address:

FORMER BUILDING 41319, 41 AREA, MCB CAMP

PENDLETON, CALIFORNIA 92055

Facility Name:

VEHICLE GREASE RACK (DECOMMISSIONED)

RWQCB Case No.:

9UT2903

DEH Case No.:

H05939-145

Property Owner:

UNITED STATES MARINE CORPS

Contact Person:

MS, TRACY SAHAGUN

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UNITED STATES MARINE CORPS

2.2 Previous Investigations

The remedial excavation activities at UST 41319 were guided by data from two previous investigations.

Tank Removal Report

In July 1994, UST 41319 was removed by Minority Enterprises, Inc (MEI, 1994). The tank excavation was approximately 11 feet by 16 feet and extended 8 feet below ground surface (bgs). A concrete tank pad was encountered at the base of the excavation, which has not been removed. Groundwater was not encountered in the excavation. Following UST removal, MEI personnel collected soil samples from the western sidewall of the excavation and below the tank pad (Figure 2-1).

Each sample was analyzed for total petroleum hydrocarbons quantified as gasoline (TPH-g) and diesel (TPH-d) by modified U.S. Environmental Protection Agency (EPA) Method 8015 and total recoverable petroleum hydrocarbons (TRPH) by EPA Method 418.1.

Soil analytical results for TPH-g, TPH-d, and TRPH are summarized in Table 3-1. Soil analytical results from a sample collected adjacent to and below the former UST location reported a TPH-g concentration of 16 milligrams per kilogram (mg/kg), a TPH-d concentration of 270 mg/kg, and a TRPH concentration of 2,600 mg/kg. Information regarding the disposition of excavated soil was not available. The excavated soil may have been used to backfill the UST excavation (Ninyo & Moore, 2000).

Environmental Site Assessment

Following removal of the UST, Ninyo & Moore conducted Environmental Site Assessment (ESA) field activities from November 1999 to January 2000 to evaluate the extent of impacted soils and assess groundwater quality (Ninyo & Moore, 2000). Eighteen vertical soil borings (41319-B1 through 41319-B18) were advanced to depths of up to 50 feet bgs in the vicinity of the former UST (Figure 2-1). Soil samples were collected from each boring at intervals ranging from 1 to 5 feet between samples. An attempt was made to collect a groundwater sample from a temporary well installed in boring 41319-B1 located in the former tank cavity. Groundwater was not observed in the temporary well after a 28-day period.

One hundred twenty-one soil samples were analyzed for TRPH by U.S. EPA Method 418.1. Selected soil samples, including those with the highest TRPH concentrations, were analyzed for the following constituents (Ninyo & Moore, 2000):

- TPH-g and TPH-d by U.S. EPA Method 8015M;
- Benzene, toluene, ethylbenzene, and xylenes (BTEX) and MTBE by U.S. EPA Method 8021B;
- Chlorinated hydrocarbons (CHs) by U.S. EPA Method 8021B;
- Polychlorinated byphenyls (PCBs) by U.S. EPA Method 8082;
- Organic lead by the California Department of Health Services (DHS) Leaking Underground Fuel Tank Manual (LUFT) Method; and
- Title 22 Metals (17 metals) by U.S. EPA Method 6010/7471.

In addition, selected soil sample extracts, including those with the highest TRPH concentrations, were analyzed following the Synthetic Precipitation Leaching Procedure (SPLP) for the following:

- BTEX/MTBE by U.S. EPA Method 8021B;
- CHs by U.S. EPA Method 8021B;
- PCBs by U.S. EPA Method 8082;
- Organic lead by DHS LUFT Method; and
- Title 22 Metals by U.S. EPA Method 6010/7471.

TRPH was reported in 21 of the 121 soil samples analyzed, in concentrations ranging from 16 to 60,000 mg/kg. TRPH concentrations in eight soil samples exceeded 1,000 mg/kg (Ninyo & Moore, 2000). TPH-d was reported in six soil samples in concentrations ranging from 18 to 3,600 mg/kg. TPH-g was reported in one soil sample at a concentration of 300 mg/kg, with hydrocarbons indicative of Stoddard solvent (Ninyo & Moore, 2000).

Toluene, ethylbenzene, and total xylenes were reported in the two soil samples with the greatest TRPH concentrations. Toluene, ethylbenzene and total xylenes concentrations were two to three orders of magnitude less than their applicable respective U.S. EPA Region 9 Preliminary Remediation Goals (PRGs) for residential soils (U.S. EPA, December 1999).

2.3 Topography

The subject site is located at Marine Corp Base Camp Pendleton California. The former UST was installed approximately 40 feet from the western side of the decommissioned Vehicle Grease Rack 41319 (Figures 1-1 and 1-2). Surface topography in the site vicinity is relatively flat at an elevation of approximately 120 feet above sea level. Surface drainage at the site is towards a small, unnamed ephemeral stream located approximately 500 feet southeast of the site.

2.4 Regional Geology and Hydrogeology

MCB Camp Pendleton is situated in the Peninsular Ranges Geomorphic Province. Geomorphic characteristics found in the peninsular range include mountain slopes, foothills, inland valleys, coastal valleys, coastal slopes, and coastal plains. Generally, MCB Camp Pendleton contains all these features, which slope to the west from the mountain backbone near the eastern border of the Base, with the exception of a low coastal mountain range (Foster Wheeler Environmental Corporation [FWEC], 2003).

The stratigraphy within the Base varies from east to west (Rosenberg, 1994). In the eastern mountains, a complex of presumably Cretaceous igneous intrusive and extrusive rocks intrude and overlie the Jurassic-aged sedimentary rocks of the Bedford Canyon Formation. An Upper Cretaceous marine conglomerate occurs in the more westerly mountain slopes and foothills. The Cretaceous Williams Formation occupies the foothills and inland valleys to the west of the eastern mountain range and may conformably overlie the Bedford Canyon Formation in the inaccessible artillery impact area. In the transition zone between the inland valleys and eastern slope of the coastal mountains, the Middle Eocene Santiago Formation unconformably overlies the Williams Formation and an intermittent paleosol developed on it. The Middle Miocene San Onofre Breccia unconformably overlies the Santiago Formation and forms the backbone of the coastal San Onofre Mountains. The coastal slope of these mountains is occupied by relatively small nearshore exposures of successively overlying Upper Miocene Monterey

Formation, Lower Pliocene Capistrano Formation, and assorted Pleistocene Terrace Deposits. Three major river valleys contain Upper Pliocene to Holocene alluvial deposits that extend into the inland valley (FWEC, 2003).

Groundwater at MCB Camp Pendleton may be present in two types of aquifers: a shallow unconfined aquifer (Moyle, 1973) and deeper, possibly confined aquifers. Both types of aquifers may be present in the larger southwest trending valleys on the Base, such as the Santa Margarita River Valley.

2.5 Site Geology and Hydrogeology

UST Site 41319 is situated upon Stewart Mesa in the San Onofre/Las Flores Creek Watershed. Surface drainage at the site is towards a small, unnamed ephemeral stream located approximately 500 feet southeast of the site. The stream flows in a southwesterly direction for approximately 1.2 miles where it discharges into the Pacific Ocean. Las Flores Creek, located approximately 0.8 miles northwest of the Site, has existing beneficial uses for agricultural supply, contact and non-contact water recreation, warm and cold freshwater habitat, wildlife habitat, and rare, threatened, or endangered species habitat. The RWQCB has exempted Las Flores Creek from municipal use designation. The nearest major surface water body is the Pacific Ocean.

UST Site 41319 is underlain by several feet of fill and Quaternary aged Older Alluvium. The fill extends from near surface to approximately 6.5 feet bgs, and consists of reddish brown to gray silty sand. The Older Alluvium typically consists of reddish brown and olive gray sandy silt and clayey silt (Ninyo & Moore, 2000).

Groundwater beneath the site occurs within the Las Pulgas Hydrologic Subarea (901.52) within the San Onofre Hydrologic Area (1.50) of the San Juan Hydrologic Unit. The hydrologic area has existing groundwater beneficial uses for municipal and agricultural supply. The nearest water supply well (10/5 18M4) is located approximately 1 mile northwest of the site. Groundwater was not encountered at a maximum depth of 50 feet bgs during the ESA. Groundwater was encountered at 36 feet bgs at UST Site 41312, located approximately 450 feet northwest of the site. The groundwater source at site 41312 is believed to be artificial recharge from a plugged boiler-water discharge floor drain. Groundwater flow is estimated to be in the southwestern direction, towards the Pacific Ocean (Ninyo & Moore, 2000).

2.6 Nature and Extent of Pre-Excavation Contamination

Laboratory results from previous investigations indicate that subsurface contaminants are the result of hydrocarbon fuels leaking from the former UST at the site. Based on the results of previous investigations, it was estimated that the lateral extent of impacted soils extends over an area approximately 80 feet by an average 40 feet and extends vertically to variable depths to an estimated maximum of 10 feet bgs. The estimated volume of hydrocarbon-impacted soil is approximately 275 cubic yards.

2.7 Proposed Cleanup Goals

Promulgated cleanup goals for TRPH, TPH-d, and TPH-g do not exist for soil. In accordance with San Diego County Department of Health Guidelines, MCB Camp Pendleton proposed soil cleanup levels that ensure the following:

- remaining leachable/mobile constituents of concern do not threaten to cause groundwater or surface water to exceed applicable (water) target cleanup levels;
- remaining constituents of concern do not threaten public health through exposure to soil vapors of the soil itself; and
- remaining constituents of concern do not create fire or explosion hazards.

Although promulgated cleanup levels for TRPH and TPH in soils do not exist, guidance is available in the Leaking Underground Fuel Tank Field (LUFT) Manual: Guidelines for Site Assessment, Cleanup, and Underground Storage Tank Closure (California State Water Resources Control Board, 1989). Generally, site-specific, risk-based levels have superceded guidelines specified in the LUFT Manual. In the case of UST Site 41319, analytical results from previous soil samples for petroleum constituents, VOCs, SVOCs, and metals are consistently less than residential PRGs, or applicable background values in the case of metals. UST Site 41319 already meets site-specific, risk-based criteria and meets RWQCB criteria for a low-risk soil-only site.

However, to meet MCB Camp Pendleton's objectives of reducing potential risk to hypothetical future construction workers and expediting site closure, the following cleanup objectives were applied.

Table 2-1. Proposed Soil Cleanup Goals

Constituent	Proposed Cleanup Goal (mg/kg)
TRPH	1,000
TPH-d	100
TPH-g	10

3.0 FIELD METHODS

This section describes the field methods implemented to remove hydrocarbon-impacted soil at UST Site 41319.

3.1 Underground Utility Survey

Prior to conducting the subsurface investigation, underground utilities were located by Underground Services Alert and Underground Locating Services Corporation using geophysical methods and as-built drawings. In addition, representatives of MCB Camp Pendleton Utilities Department identified underground utility locations using facility drawings. Utilities identified within the planned excavation area were identified, marked, and provisions were made to avoid utility damage during remedial activities.

3.2 Worker Health and Safety

A site-specific Worker Health and Safety Plan was prepared by PWC personnel. This document was reviewed and signed by all PWC personnel and subcontractors prior to conducting work at the site. Excavation activities were coordinated in advance with Area 41 operations personnel and advance notification was provided to the MCB Camp Pendleton Resident Officer in Charge of Construction.

3.3 Public Health and Safety

To reduce the potential for public exposure to site hazards, the adjacent tenants were notified prior to the start of work. Barricades and danger tape was set around the planned perimeter of the excavation. A public notice providing project information and a 24-hour telephone number for complaints or questions was posted in the vicinity of the work area.

3.4 Remedial Excavation

On October 10 2004, preparation for remedial activities began. The UST area was cleared of vehicles and traffic, fenced off as above, and secured from unauthorized access. Prior to excavating, all previous investigation sampling locations were marked over the proposed excavation, delineating the extent of fuel-impacted soil as defined by historical data.

In accordance with the excavating process outlined in the RAWP, the following scope of work was completed to remove hydrocarbon-impacted soil that may present a risk to potential future construction workers:

- Approximately 211 yds³ of impacted soil was removed immediately south and west of the former tank to achieve soil cleanup goals of <1,000 mg/kg TRPH,
 <100 mg/kg TPH-d, and <10 mg/kg TPH-g.
- Confirmation soil sampling was completed on the bottom and sidewalls of the excavation to define the boundary of the excavation.
- Asphalt and concrete was taken to 3-Mile Pit in accordance with MCB Camp Pendleton recycling directives.
- Following laboratory analysis and waste profiling, the manifesting and disposal of excavated soil was conducted in conjunction with the MCB Camp Pendleton

Hazardous Waste Group and Assistant Chief of Staff of Environmental Security (AC/S ES).

• The site was properly restored by backfilling with compacted clean soil and Class II base, and sealing the excavation with concrete and asphalt.

Between October 10, 2004 and November 10, 2004, hydrocarbon-impacted soil at the site was excavated to an average depth of approximately 5 feet bgs. Excavation depths in select areas ranged from approximately 2.5 feet to 12 feet bgs, and were determined by either previous data or confirmation sampling results. Heavy rain caused several disruptions in planned field activities during this time.

Soil was removed based on previous data, visual hydrocarbon staining and/or odor, and real-time analytical data for confirmation soil samples using an on-site mobile laboratory. The bulk of hydrocarbon-impacted soil was encountered south of the former UST. Impacted soil was also excavated from a small asphalt parking area to the west of the former UST (Figure 4-1). Site photographs are presented in Appendix A.

Following initial removal of all anticipated hydrocarbon-impacted soil based on previous data, confirmation samples were collected at the limits of the excavation and submitted to a mobile laboratory to confirm that impacted soil above 1,000 mg/kg TRPH and/or TPH was removed. Where elevated concentrations of hydrocarbons were detected in a confirmation sample, the excavation was enlarged laterally or vertically as necessary to fully remove the impacted soil and attain cleanup goals. A total of approximately 211 yds³ of soil was removed during excavation activities; this amount was slightly less than the anticipated amount of 275 yds³. The following subsections describe confirmation soil sampling activities.

3.5 Soil Sampling

To assess the lateral and vertical extent of hydrocarbon-impacted soil above project action levels and confirm removal, soil samples were collected at various depths within the excavation. Select samples were collected within areas of known contamination (based on visual staining and odor) for waste characterization purposes, and on the bottom and sidewalls of the excavation to define the limit of the excavation. The limit of the excavation is displayed on Figure 4-1 along with site photographs presented in Appendix A. Cross sections of the excavation are shown on Figures 4-2 (A-A') and 4-3 (B-B').

Soil samples were analyzed by state certified laboratories that included Calscience Environmental Laboratories, Navy Environmental Laboratory, and the mobile laboratory provided on-site by HP Labs, Inc. Ten percent of the samples analyzed by the mobile laboratory were also submitted to the stationary laboratories for verification purposes. Soil sample analysis included TPH as gasoline, diesel, and oil (TPH-g, TPH-d, TPH-o) in accordance with EPA Method 8015 Modified, and TPRH using EPA Method 418.1 Modified.

A California Department of Health Services-Certified mobile laboratory (H&P Laboratories) was on-site to analyze soil samples for TRPH and TPH as TPH-g, TPH-d, and TPH-o as they were collected. Soil samples were collected either from within the

A California Department of Health Services-Certified mobile laboratory (H&P Laboratories) was on-site to analyze soil samples for TRPH and TPH as TPH-g, TPH-d, and TPH-o as they were collected. Soil samples were collected either from within the excavation directly, or from the excavators' bucket near the teeth when safety constraints prohibited entering the excavation. Soil samples were placed into laboratory-provided glass jars, sealed with Teflon-lined caps, properly labeled, and delivered to the on-site mobile laboratory for immediate analyses.

The Encore® sampling system was used for collection of the TPH-g samples submitted for stationary laboratory verification analysis. These samples were handled according to the instructions provided with the Encore® system (Appendix F) and in accordance with EPA Method 5035, from Test Methods for Evaluation of Solid Waste, SW-846, Update III, U.S. EPA 1997. PWCSD retained custody of and delivered the samples bound for the stationary analytical laboratory (Navy Regional Environmental Laboratory).

Sampling activities were supervised by a State of California certified engineering geologist. Disposable sampling equipment was used to prevent cross-contamination between samples and to eliminate the need for decontamination of small non-disposable sample equipment. Field personnel used a new pair of disposable gloves for the collection of each soil sample.

3.6 Sample Handling, Documentation, and Custody

Prior to sample collection, sample labels were filled out and affixed to each sample container. The alphanumeric sample names assigned to each sample indicate the location of the soil sample and the depth (bgs) at which the soil sample was retrieved. Each sample was placed in a Ziploc® plastic bag to keep the sample container and label dry.

Samples were controlled under Chain-of-Custody (COC) protocol. The COC forms were completed and signed by the field crew and stationary laboratory for analysis. A separate COC was used to document mobile laboratory sample custody. COC forms are available in Appendix B. Daily field logs were maintained by field personnel to document field observations and activities occurring during the course of the project.

3.6.1 Global Positioning System Survey

To accurately locate the boundary of the excavation and the sample locations, a Trimble® global positioning system (GPS) unit was used. The excavation perimeter and each sample location were surveyed, and the coordinates plotted on site maps.

3.6.2 Site Restoration

Following removal activities the excavation the site was properly restored by backfilling with clean soil, Class II base, and sealing the excavation with concrete and asphalt to restore the site for its current use as a vehicle staging area and street parking. Engineering fill material was placed in the excavation areas from 5 feet bgs to grade in 1-foot compacted lifts. The ground surface was restored to match pre-existing grade and conditions.

Assistant Chief of Staff of Environmental Security. Investigation-derived waste was disposed of as follows:

- Excavated soil was secured with plastic and straw rolls, and temporarily stored
 on-site pending profiling results. Following laboratory analysis and waste
 profiling, 285 tons of excavated soil was transported to Candelaria
 Environmental, an authorized biotreatment facility. The Non-Hazardous
 Materials Hauling Manifests and Soil Profile Form are provided in Appendix C.
- All asphalt and concrete removed during excavation activities was segregated into separate stockpiles and transported to the Three-Mile Pit located at MCB Camp Pendleton for recycling.
- Non-hazardous solid waste was disposed of as solid waste with other trash generated at MCB Camp Pendleton.

4.0 RESULTS

Between October 10 and November 10, 2004, approximately 211 yds³ of hydrocarbon-impacted soil were excavated and 30 confirmation soil samples were collected and analyzed at UST Site 41319. The results of this investigation follow.

4.1 Soil Analytical Results

Confirmation soil sample analytical results indicate that hydrocarbon-impacted soil has essentially been removed from the area accessible to excavation. Analytical data are summarized in Table 4-1 and Figure 4-1. Figures 4-2 and 4-3 present cross sections of the excavation and site area.

Confirmation soil samples were analyzed on-site by H&P Labs. To verify the mobile laboratory results, select samples (10% of the total number of samples) were also delivered to a stationary lab for analysis. The following sections describe the analytical results for both the mobile and fixed laboratories.

4.1.1 Mobile Laboratory

A total of 29 confirmation soil samples were analyzed by H&P Labs during two separate field mobilization efforts (October 19 and November 1, 2004). In accordance with the Work Plan, samples collected on October 19 were submitted to the on-site laboratory for Samples collected on November 1 were analysis of TPH-g, TPH-d and TRPH. inadvertently not analyzed by the mobile lab for TRPH but instead for the full range of It should be noted, however, that TRPH results TPH as TPH-g, TPH-d, and TPH-o. from the verification analyses conducted by the stationary laboratory corroborated with TPH extended range analyses performed by the mobile laboratory. The greatest TPH concentration reported was 4900 mg/kg for TPH-o in a sample collected from 41319-EX11 at a depth of 4.0 feet bgs. Several samples were collected from a visibly stained horizon and analyzed for TPH-g, TPH-d, and TPH-o, the data was used for waste characterization purposes. Most samples collected from the excavation sidewalls and bottom were compliant with project cleanup goals. TPH-g was not reported in any confirmation soil samples. TPH-d was reported at a concentration of 210 mg/kg in one sample; 41319 EX11 at a depth of 4.0 feet bgs. Three samples contained TRPH concentrations exceeding project cleanup goals, the three samples were taken from previous bore locations and used to confirm analytical results from previous investigations at this site. Although discrepancies between historical and current data were noted, the three locations were over excavated to ensure removal of impacted soil and attain cleanup goals.

4.1.2 Fixed Laboratory

In accordance with the RAWP and SWDIV's internal directives, confirmation soil samples (two samples) were submitted to Navy Regional Environmental Laboratory for verification analysis. The greatest concentration in the samples analyzed by the stationary laboratory contained TPH-d reported as 130 mg/kg in the sample collected from B4S-1. It should be noted that although TPH-g and TRPH results in this sample correlated well with results from the mobile laboratory, the TPH-d concentration from the

correlated well with results from the mobile laboratory, the TPH-d concentration from the on-site analyses was reported as non-detect above the 10 mg/kg reporting limit. As a conservative measure, this location was over excavated to remove the potentially impacted soil and attain cleanup goals. Stationary laboratory data were submitted to Laboratory Data Consultants for third party validation, and the results used to compare to mobile laboratory data. Review of data validation results indicates that TPH-g analyses for the sample collected from B4S-1 was analyzed 4 days past the holding time for gasoline. Although results have been flagged with a "J" qualifier to reflect an estimated detection limit, it is unlikely that TPH-g would be present in this sample. TPH-g was not detected above the reporting limits in any of the excavation samples. The detected TPH-g concentration of 0.29 mg/kg in one of the samples analyzed by the stationary laboratory (4239-01 NAV-EX21) was between the method detection limit and the reporting limit and therefore was qualified as an estimated quantity to reflect the uncertainty within this concentration range.

4.2 Extent of Hydrocarbon-Impacted Soil Remaining In Place

Utilities in the vicinity of the excavation include storm drains and sewer, which constrained excavation efforts. Utility depth in this area is at the same depth as the impacted soil. While utilities may have contributed to contaminant transport in the UST area, the stability of the remaining contaminant plume is likely due to the fine-grained nature of the soils at the site coupled with the comparatively limited mobility of the fuel oil contaminant.

Only one sample in the accessible excavation area showed a remnant of contamination in excess of the soil cleanup goals. Sample 41319-EX 11 represents an area of inaccessible impacted soil which remains directly below the storm water drain pipe and the cement block retaining wall. It is estimated that approximately 14 cubic yards of contaminated soil exists underneath this area of the site.

To characterize the inaccessible soil remaining in place beneath the storm drain pipe, three samples were collected along the length of the pipe and one sample was collected in the southwest corner of the tank pit. Concentrations of TPH-d and TPH-o were reported in samples 41319-EX11 and 41319-EX09. Approximately 14 cubic yards of impacted soil are estimated to remain in place beneath the pipe, the cement block retaining wall, and the southwestern edge of the UST excavation. A cross section summarizing conditions in the vicinity of these utilities is presented on Figure 4-2.

5.0 SUMMARY AND RECOMMENDATIONS

The remedial action proposed in the RAWP was elective, and was initiated by MCB Camp Pendleton to facilitate site closure and reduce hypothetical future risk to construction workers. Pre-remedial conditions at the site met RWQCB criteria for a low-risk soil-only scenario (RWQCB, 1996). In accordance with the RAWP, hydrocarbon-impacted soil was excavated to meet remedial action cleanup goals to the extent practical. Confirmation soil samples were collected to ensure removal of impacted soil. Removal of a small volume of hydrocarbon-impacted soil was not feasible due to utilities.

The following summary is provided:

- Visibly stained hydrocarbon-impacted soil was encountered and removed near the former UST. Laboratory analysis of a soil sample collected in this visibly stained soil indicates that the hydrocarbons are composed of predominantly diesel range and higher hydrocarbons.
- Soil analytical data collected during excavation activities confirmed contaminant removal.
- Using data from the current and previous investigations, the lateral and vertical extent of impacted soil is adequately assessed.
- Approximately 285 tons of hydrocarbon-impacted soil were removed from the
- An estimated 14 yds³ of hydrocarbon-impacted soil remains inaccessible beneath the storm water pipe and cement block retaining wall.
- Only TPH-d and TPH-o were detected in levels above the Site Action Levels in the area of the storm drain.
- All soil removed from the excavation was removed from the site for disposal. An estimated 14 cubic yards of impacted soil remains beneath the area of the storm water drain.
- The site should be considered a low risk soils only case and no further action required for the following reasons:
 - o The UST and nearly all hydrocarbon-impacted soil associated with the UST system has been removed.
 - o The site has been adequately characterized.
 - No current groundwater impact exists.
 - o Because the release is old, the site is paved, and layers with low permeability exist between the groundwater table and the excavation, no groundwater, surface water or other sensitive receptors are likely to be impacted.

- groundwater, surface water or other sensitive receptors are likely to be impacted.
- o The site presents no significant risk to human health or the environment from any remaining adsorbed-phase hydrocarbons or vapors.

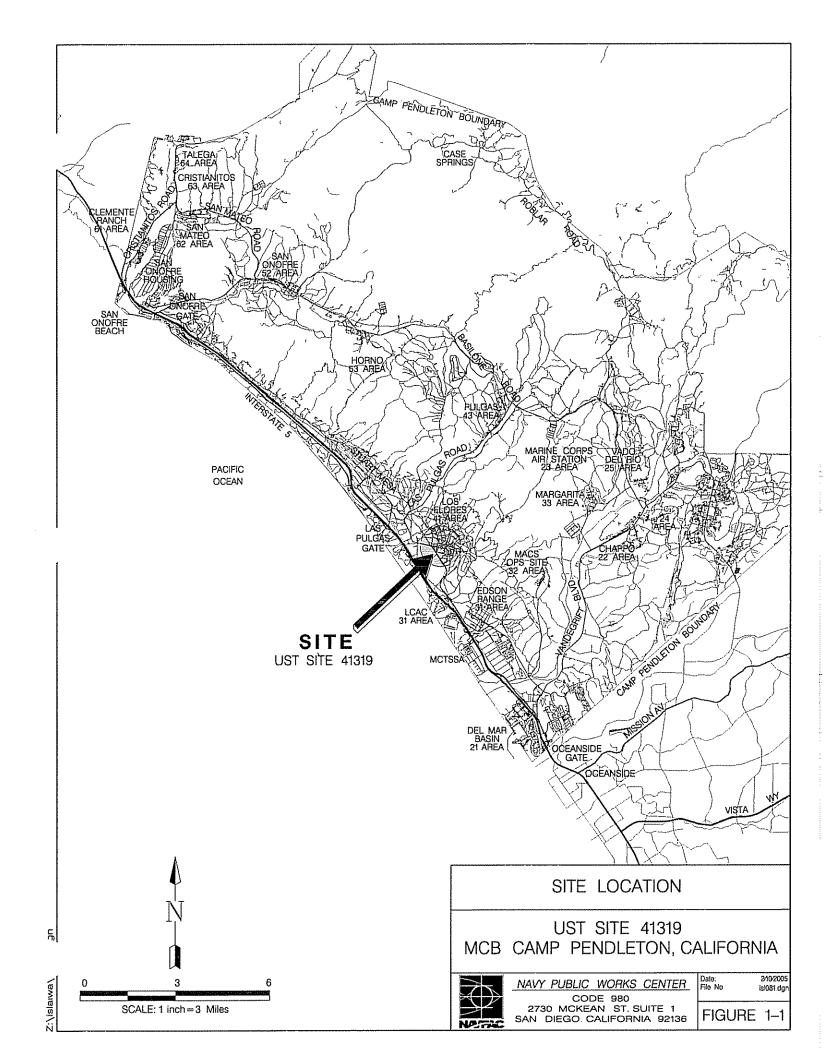
The RWQCB Case Closure Summary is available in Appendix G.

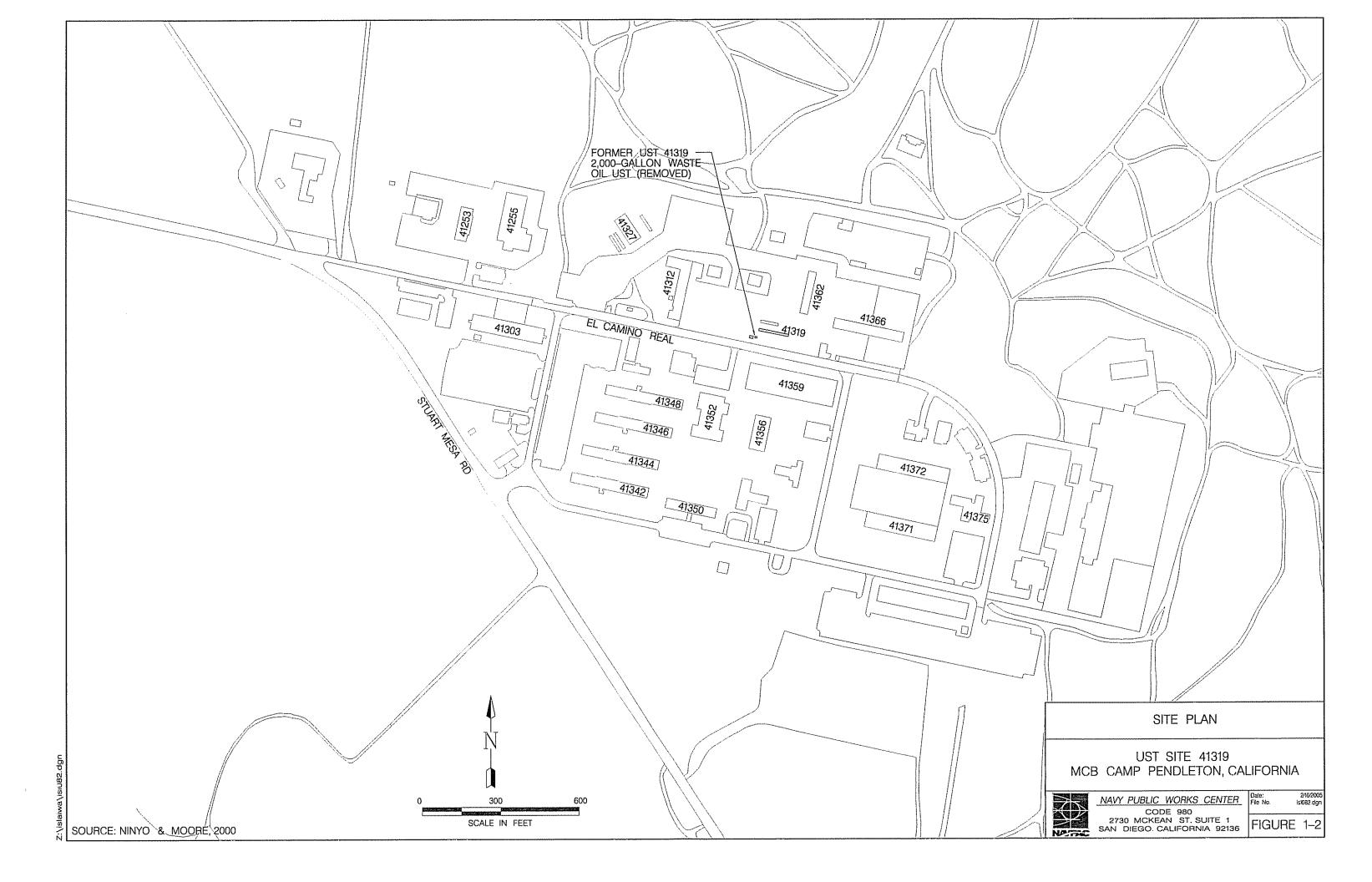
6.0 REFERENCES

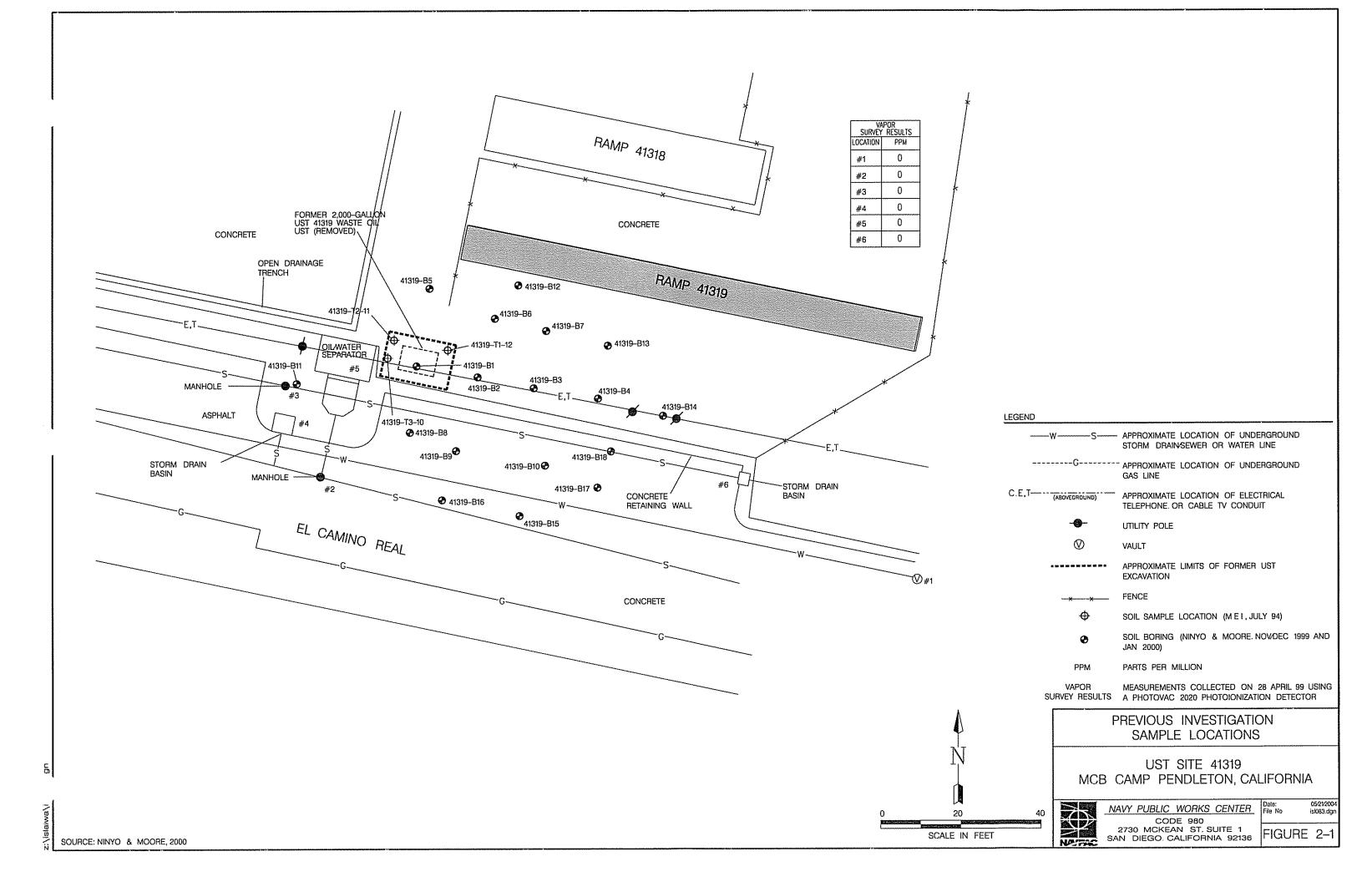
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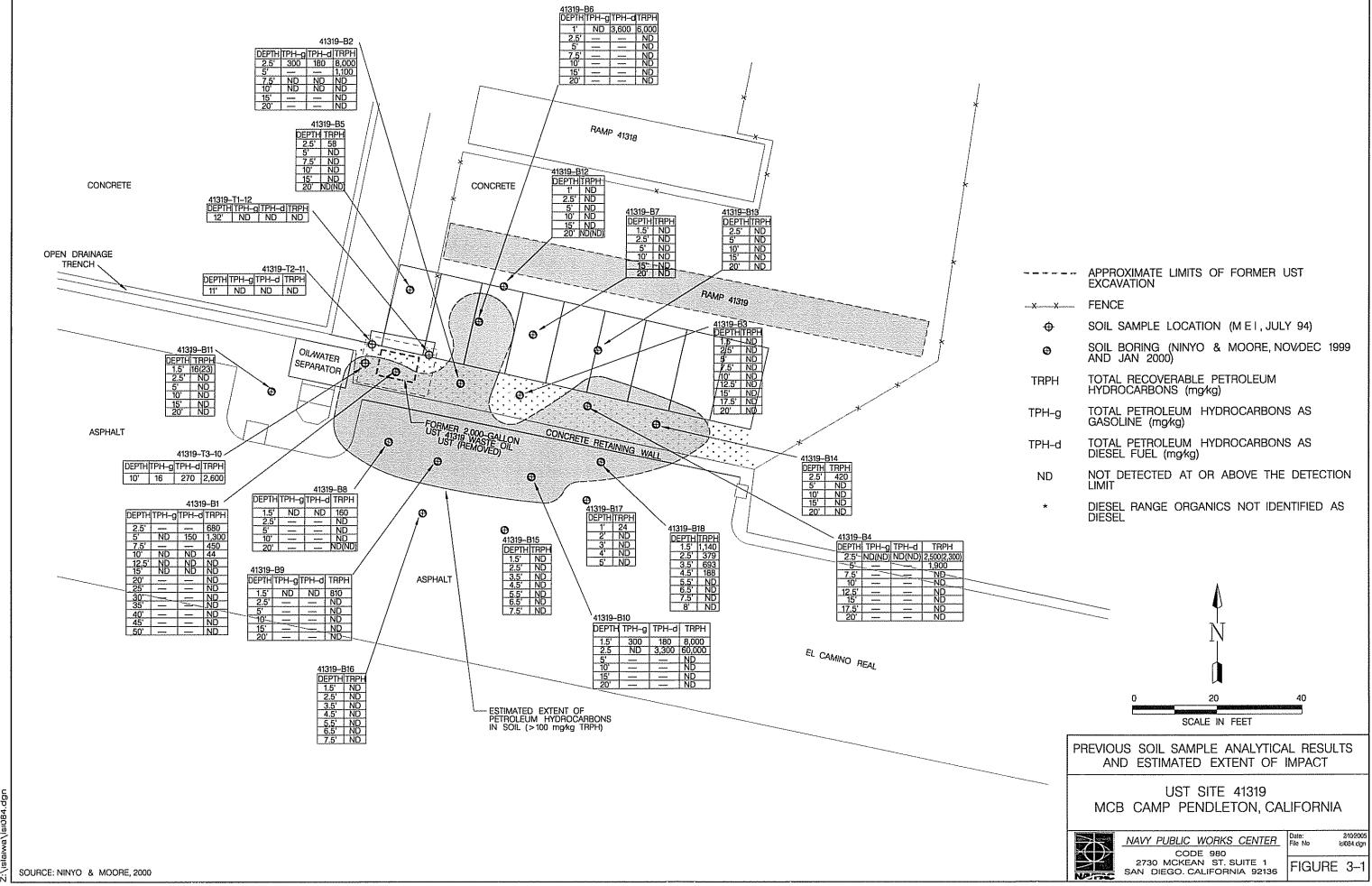
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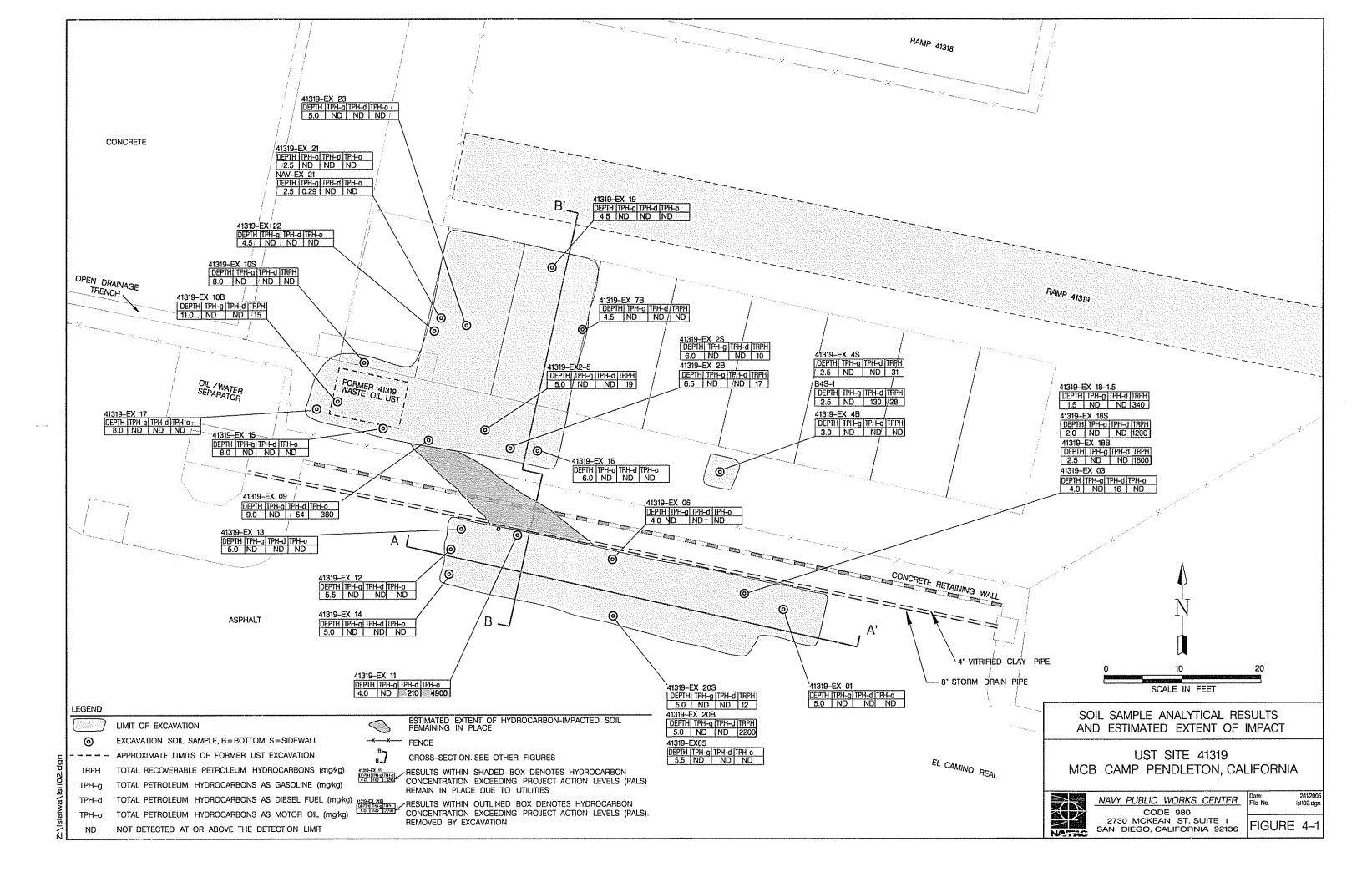
FIGURES

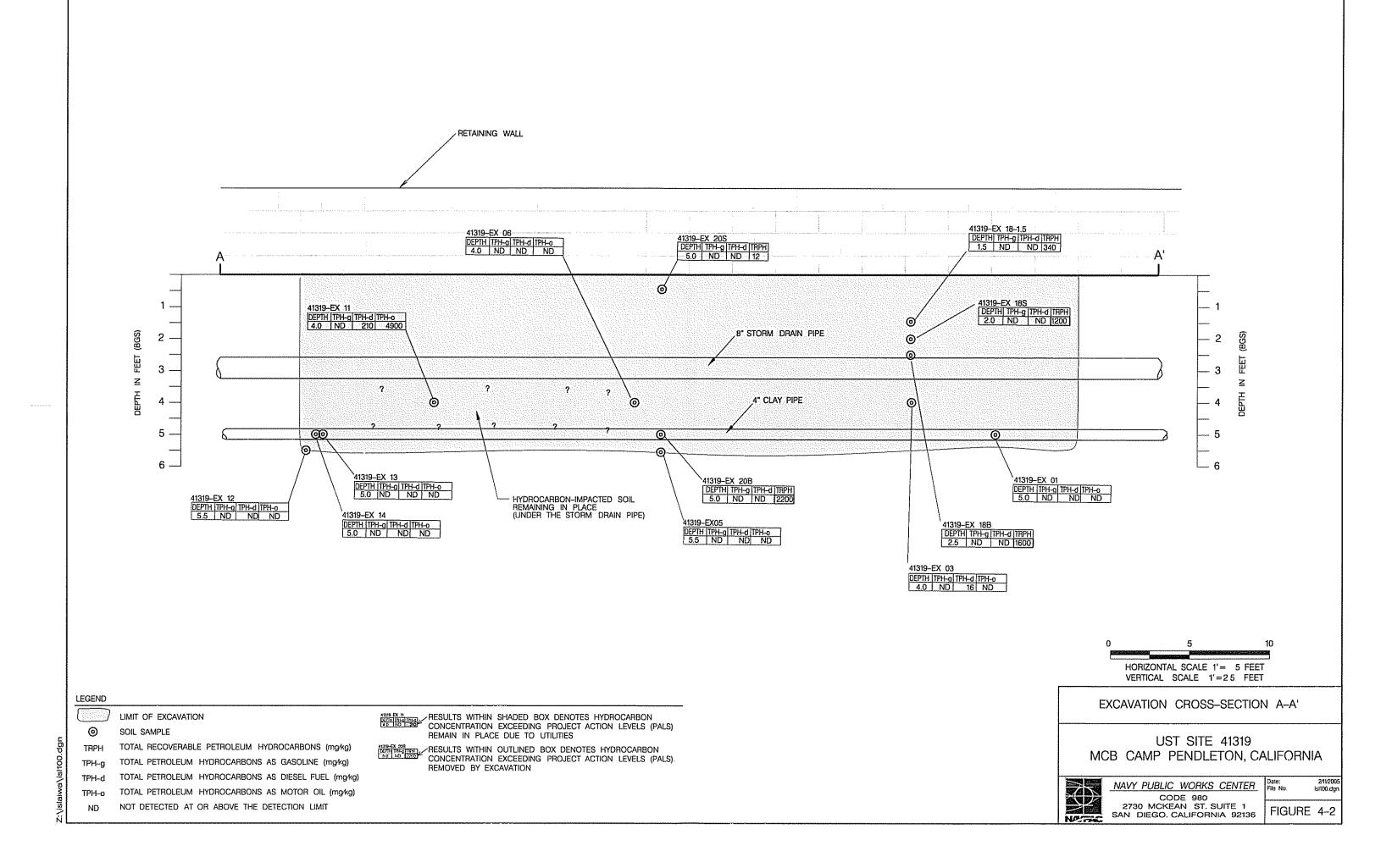


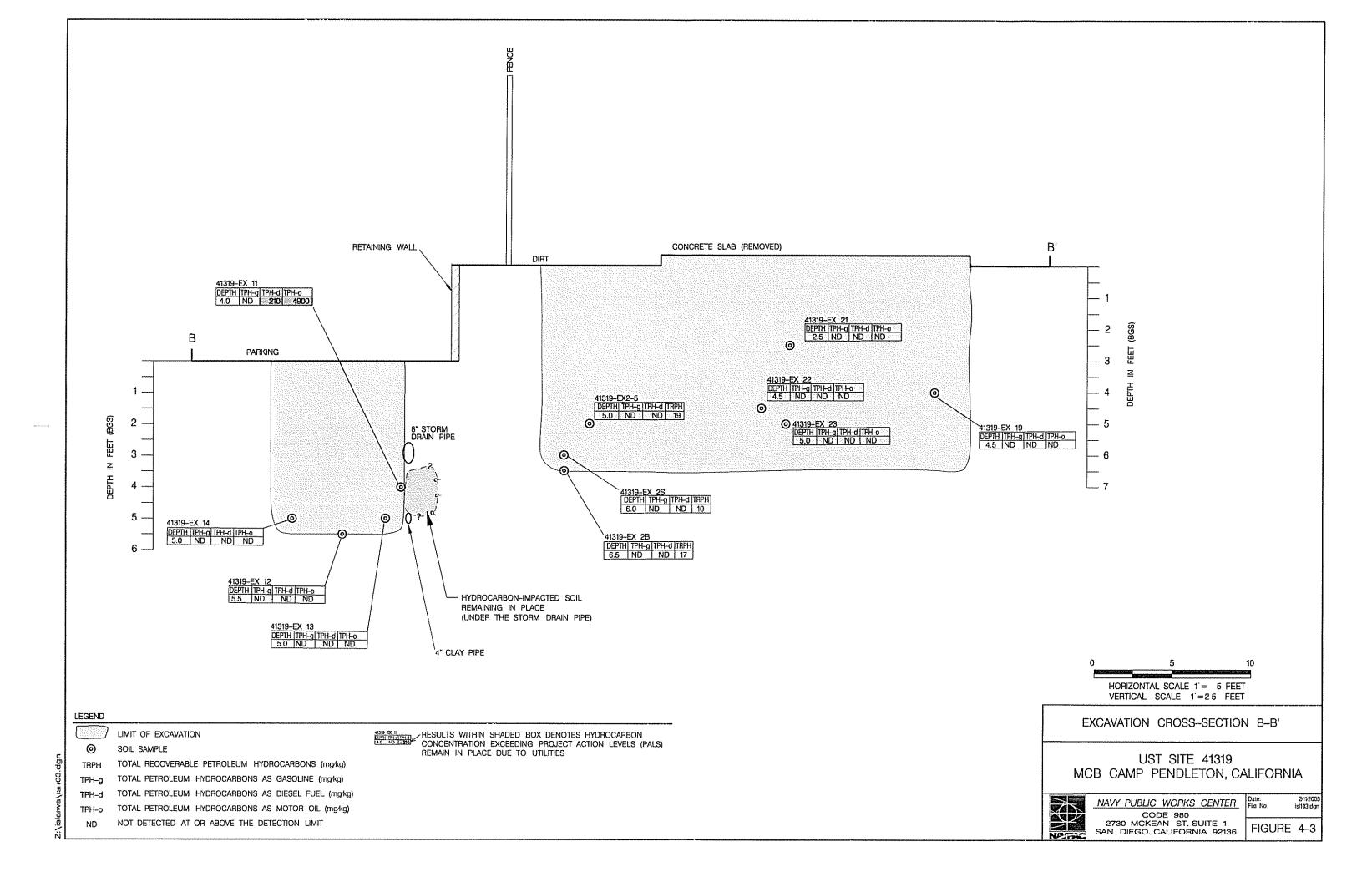












TABLES

Table 4-1 **Excavation Soil Analytical Results (mg/kg)**

Analytical Laboratory Results from On-Site Lab

Analyte	Method	41319-EX01 ^a EX01 ^b 11/01/2004 ^c	41319-EX03 EX03 11/01/2004	41319-EX05 EX05 11/01/2004	41319-EX06 EX06 11/01/2004	41319-EX09 EX09 11/01/2004	41319-EX11 EX11 11/01/2004	41319-EX12 EX12 11/01/2004	41319-EX13 EX13 11/01/2004
TPH-d	8015M	10U	16	10U	10U	54	210	10U	10U
TPH-g	8015M	10U	10U	10U	10U	100	10U	10U	10U
TPH-o	8015M	10Ų	250	10U	10U	380	4900	10U	10U

Analyte	Method	41319-EX14 EX14 11/01/2004	41319-EX15 EX15 11/01/2004	41319-EX16 EX16 11/01/2004	41319-EX17 EX17 11/01/2004	41319-EX19 EX19 11/01/2004	41319-EX21 EX21 11/01/2004	41319-EX22 EX22 11/01/2004	41319-EX23 EX23 11/01/2004
TPH-d	8015M	10U	10U	10U	10U	10U	10U	10U	10U
TPH-g	8015M	10U	10U	10U	10U	10U	10U	10U	10U
TPH-o	8015M	10U	10U	10U	10U	10U	10U	10U	10U

		41319-EX 2-5	41319-EX 10B	41319-EX 10S	41319-EX 2B	41319-EX 2S	41319-EX 4B	41319-EX 4S	41319-EX 7B
		EX2-5	EX10B	EX10S	EX2B	EX2S	EX4B	EX4S	EX7B
Analyte	Method	10/19/2004	10/19/2004	10/19/2004	10/19/2004	10/19/2004	10/19/2004	10/19/2004	10/19/2004
TRPH	418.1	19	15	10U	17	10	39	31	10U
TPH-d	8015M	10U	10U	10U	10U	10U	10U	10U	10U
TPH-g	8015M	10U	10U	10U	10U	10Ü	10U	10U	10U

Analyte	Method	41319-EX 18-1.5 EX18-1.5 10/19/2004	41319-EX 18S EX18S 10/19/2005	41319-EX 18B EX18B 10/19/2006	41319-EX 20B EX20B 10/19/2007	41319-EX 20S EX20S 10/19/2008
TRPH	418.1	340	1200	1600	2200	12
TPH-d	8015M	10U	10U	10U	10U	10U
TPH-g	8015M	10U	10U	10U	10U	10U

Analytical Labo	ratory Results from St	ationary Lab
42397-01 NA	V-	
EX21	42318-01 B4S-1	
NAV-EX21	B4S-1	
11/01/2004	10/18/2004	
9.2J	28J	
11.8U	130	
0.29J	9.61UJ	

Notes:

a- Sample ID

b - Station ID

d - Collection Date

Results in **bold** exceed the reporting limits

Acronyms/Abbreviations:

mg/kg - milligrams per kilogram

U - not detected at or above stated reporting limit

J - estimated value

UJ - not detected at or above estimated reporting limit

TPH-d - Total Petroleum Hydrocarbon as diesel

TPH-g - Total Petroleum Hydrocarbon as gasoline

TPH-o - Total Petroleum Hydrocarbon as motor oil

TRPH - Total Recoverable Petroleum Hydrocarbon

TABLE 2-1 – SUMMARY OF HISTORICAL SOIL SAMPLE RESULTS UST SITE 41319

Sample	Sample ID	Date Sampled	Depth	TRPH	TPH-G	TPH-D	BTEX/MTBE	Source
Location	1	<u> </u>	(feet bgs)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Source
UST	41319-T1-12'	26-Jul-94	12.0	ND	ND	ND	***	A
Excavation	41319-T2-11'	26-Jul-94	11.0	ND	ND	ND		A
	41319-T3-10'	26-Jul-94	10.0	2,600	16	270		A
	41319-B1-02.5	9-Nov-99	2.5	680				В
	41319-B1-05	9-Nov-99	5	1.300 ¹	ND	150 ²	ND	В
	41319-B1-07.5	9-Nov-99	7.5	450			***	В
	41319-B1-10	9-Nov-99	10	44	ND	ND	ND	В
	41319-B1-12.5	9-Nov-99	12.5	ND	ND	ND		В
Boring	41319-B1-15	9-Nov-99	15	ND	ND	ND		В
41319-B1	41319-B1-20	9-Nov-99	20	ND				В
11317 131	41319-B1-25	9-Nov-99	25	ND				В
	41319-B1-30	9-Nov-99	30	ND				В
	41319-B1-35	9-Nov-99	35	ND				В
	41319-B1-40	9-Nov-99	40	ND		<u> </u>		В
	41319-B1-45	9-Nov-99	45	ND	**		49-44-	В
	41319-B1-50	9-Nov-99	50	ND		*		В
	41319-B2-02.5	9-Nov-99	2.5	8000¹	300 ³	180²	toluene 0.29 ethylbenzene 0.34 xylenes 1.5	В
Boring	41319-B2-05	9-Nov-99	5	1100				В
41319-B2	41319-B2-07.5	9-Nov-99	7.5	ND	ND	ND	***	В
	41319-B2-10	9-Nov-99	10	ND	ND	ND		B
	41319-B2-15	9-Nov-99	15	ND				B
	41319-B2-20	9-Nov-99	20	ND				В
	41319-B3-01.5	22-Nov-99	1.5	ND				В
	41319-B3-02.5	22-Nov-99	2.5	ND				В
	41319-B3-05	22-Nov-99	5	ND				В
Boring	41319-B3-07.5	22-Nov-99	7.5	ND				<u>в</u> В
	41319-B3-10	22-Nov-99	10	ND				<u>В</u>
41319-B3	41319-B3-12.5	22-Nov-99	12.5	ND				
	41319-B3-15	22-Nov-99	15	ND				В
	41319-B3-17.5	22-Nov-99	17.5	ND				B
	41319-B3-20	22-Nov-99	20	ND	ļ			В
	1	1 40 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	۷۷]	IND	<u> </u>			В

Historneal soil results table 1,xis Report Table i 1 of 5

TABLE 2-1 – SUMMARY OF HISTORICAL SOIL SAMPLE RESULTS UST SITE 41319

Sample	Carrella ID	D.4. C1.3	Depth	TRPH	TPH-G	TPH-D	BTEX/MTBE	-
Location	Sample ID	Date Sampled	(feet bgs)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Source
	41319-B4-02.5	22-Nov-99	2.5	2,500 ¹ (2,300 ¹)	ND(ND)	ND(ND)	ND(ND)	В
	41319-B4-05	22-Nov-99	5	1,900 ¹				В
	41319-B4-07.5	22-Nov-99	7.5	ND				В
Boring	41319-B4-10	22-Nov-99	10	ND				В
41319-B4	41319-B4-12.5	22-Nov-99	12.5	ND				В
	41319-B4-15	22-Nov-99	15	ND				В
	41319-B4-17.5	22-Nov-99	17.5	ND	**		<u></u>	В
	41319-B4-20	22-Nov-99	20	ND				В
	41319-B5-02.5	22-Nov-99	2.5	58				В
	41319-B5-05	22-Nov-99	5	ND			<u></u>	В
Boring	41319-B5-07.5	22-Nov-99	7.5	ND				В
41319-B5	41319-B5-10	22-Nov-99	10	ND				В
	41319-B5-15	22-Nov-99	15	ND	+-			В
	41319-B5-20	22-Nov-99	20	ND(ND)				В
	41319-B6-01	22-Nov-99	1	6,000 ¹	ND	3,600	ethylbenzene 0.077 xylenes 0.22	В
	41319-B6-02.5	22-Nov-99	2.5	ND			-	В
Boring	41319-B6-05	22-Nov-99	5	ND	-			В
41319-B6	41319-B6-07.5	22-Nov-99	7.5	ND			<u> </u>	В
	41319-B6-10	22-Nov-99	10	ND				В
	41319-B6-15	22-Nov-99	15	ND	***		-	В
	41319-B6-20	22-Nov-99	20	ND				В
	41319-B7-01.5	22-Nov-99	1.5	ND				В
	41319-B7-02.5	23-Nov-99	2.5	ND				В
Boring	41319-B7-05	23-Nov-99	5	ND	**			В
41319-B7	41319-B7-10	23-Nov-99	10	ND	**			В
	41319-B7-15	23-Nov-99	15	ND				В
	41319-B7-20	23-Nov-99	20	ND				В

Historical soil results table 1.xls Report Table 1 2 of 5

TABLE 2-1 – SUMMARY OF HISTORICAL SOIL SAMPLE RESULTS UST SITE 41319

Sample Location	Sample ID	Date Sampled	Depth (feet bgs)	TRPH (mg/kg)	TPH-G (mg/kg)	TPH-D (mg/kg)	BTEX/MTBF (mg/kg)	C	Source
	41319-B8-01.5	23-Nov-99	1.5	160	ND	ND	ND		В
*	41319-B8-02.5	23-Nov-99	2.5	ND					В
Boring	41319-B8-05	23-Nov-99	5	ND		 -			В
41319-B8	41319-B8-10	23-Nov-99	10	ND					В
	41319-B8-20	23-Nov-99	20	ND(ND)					В
	41319-B9-01.5	23-Nov-99	1.5	810	ND	ND	ND	•	В
	41319-B9-02.5	23-Nov-99	2.5	ND					В
Boring	41319-B9-05	23-Nov-99	5	ND					В
41319-B9	41319-B9-10	23-Nov-99	10	ND					В
	41319-B9-15	23-Nov-99	15	ND					В
	41319-B9-20	23-Nov-99	20	ND			_		В
	41319-B10-01.5	23-Nov-99	1.5	810					В
Boring	41319-B10-02.5	23-Nov-99	2.5	60,000²	ND	3,300 ¹	toluene ethylbenzene xylenes	0.21 0.45 1.5	В
41319-B10	41319-B10-05	23-Nov-99	5	ND		- -	*-		В
	41319-B10-10	23-Nov-99	10	ND			-		В
	41319-B10-15	23-Nov-99	15	ND				***************************************	В
	41319-B10-20	23-Nov-99	20	ND		1			В
	41319-B11-01.5	23-Nov-99	1.5	16(23)					В
	41319-B11-02.5	23-Nov-99	2.5	ND	**				В
Boring	41319-B11-05	23-Nov-99	5	ND		 			В
41319-B11	41319-B11-10	23-Nov-99	10	ND					В
	41319-B11-15	23-Nov-99	15	ND			-		В
	41319-B11-20	23-Nov-99	20	ND		İ			B
	41319-B12-01	2-Dec-99	1	ND					В
	41319-B12-02.5	2-Dec-99	2.5	ND	 	 			В
Boring	41319-B12-05	2-Dec-99	5	ND					В
41319-B12	41319-B12-10	2-Dec-99	10	ND					В
	41319-B12-15	2-Dec-99	15	ND					В
	41319-B12-20	2-Dec-99	20	ND(ND)					В

Historical soil results table 1.xls Report Table 1 3 of 5

TABLE 2-1 – SUMMARY OF HISTORICAL SOIL SAMPLE RESULTS UST SITE 41319

Sample Location	Sample ID	Date Sampled	Depth (feet bgs)	TRPH (mg/kg)	TPH-G (mg/kg)	TPH-D (mg/kg)	BTEX/MTBE (mg/kg)	Source
	41319-B13-02.5	2-Dec-99	2.5	ND				В
D	41319-B13-05	2-Dec-99	5	ND	**		**	В
Boring 41319-B13	41319-B13-10	2-Dec-99	10	ND			***	В
71313-013	41319-B13-15	2-Dec-99	15	DM				В
	41319-B13-20	2-Dec-99	20	ND				В
	41319-B14-02.5	2-Dec-99	2.5	420			ND	В
Boring	41319-B14-05	2-Dec-99	5	ND			**	В
41319-B14	41319-B14-10	2-Dec-99	10	ND			~**	В
+110"C1C1+	41319-B14-15	2-Dec-99	15	ND				В
	41319-B14-20	2-Dec-99	20	ND				В
	41319-B15-01.5	6-Dec-99	1.5	ND			**	В
	41319-B15-02.5	6-Dec-99	2.5	ND			**	В
Boring	41319-B15-03.5	6-Dec-99	3.5	ND		-		В
41319-B15	41319-B15-04.5	6-Dec-99	4.5	ND		-	==	В
31317-B13	41319-B15-05.5	6-Dec-99	5.5	ND				В
	41319-B15-06.5	6-Dec-99	6.5	ND				В
	41319-B15-07.5	6-Dec-99	7.5	ND			***	В
	41319-B16-01.5	6-Dec-99	1.5	ND				В
	41319-B16-02.5	6-Dec-99	2.5	ND				В
D	41319-B16-03.5	6-Dec-99	3.5	ND				В
Boring 41319-B16	41319-B16-04.5	6-Dec-99	4.5	ND			<u></u>	В
41313-010	41319-B16-05.5	6-Dec-99	5.5	ND			**	В
	41319-B16-06.5	6-Dec-99	6.5	ND	+			В
	41319-B16-07.5	6-Dec-99	7.5	ND			***	В
	41319-B17-01	6-Dec-99	1	24			**	В
Darina	41319-B17-02	6-Dec-99	2	ND	**			В
Boring 41319-B17	41319-B17-03	6-Dec-99	3	ND				B
71317-017	41319-B17-04	6-Dec-99	4	ND				В
	41319-B17-05	6-Dec-99	5	ND(ND				$\frac{B}{B}$

Historical soil results table 1.xls Report Table 1 4 of 5

TABLE 2-1 – SUMMARY OF HISTORICAL SOIL SAMPLE RESULTS
UST SITE 41319

Sample Location	Sample ID	Date Sampled	Depth (feet bgs)	TRPH (mg/kg)	TPH-G (mg/kg)	TPH-D (mg/kg)	BTEX/MTBE (mg/kg)	Source
	41319-B18-01.5	7-Jan-00	1.5	1,100		78		В
	41319-B18-02.5	7-Jan-00	2.5	380		ND		В
	41319-B18-03.5	7-Jan-00	3.5	690		18		В
Boring	41319-B18-04.5	7-Jan-00	4,5	190		ND		В
41319-B18	41319-B18-05.5	7-Jan-00	5.5	ND		ND	<u></u>	В
	41319-B18-06.5	7-Jan-00	6.5	ND		ND		В
	41319-B18-07.5	7-Jan-00	7.5	ND		ND		В
	41319-B18-08	7-Jan-00	8	ND		ND	***	В
Detection Limits				10	*	10	*	

NOTES:

bgs Below ground surface. mg/kg Milligrams per kilogram.

BTEX/MTBE Benzene, toluene, ethylbenzene, xylenes, and methyl-tert-butyl ether by USEPA test method 8021.

ND Analyte not detected at or above method detection limit.

TPH-D Total petroleum hydrocarbons as diesel fuel by modified USEPA test method 8015.

TPH-G Total petroleum hydrocarbons as gasoline by modified USEPA test method 8015.

TRPH Total recoverable petroleum hydrocarbons by USEPA test method 418.1.

Detection level increased 10 times due to sample dilution.

Hydrocarbons present in diesel-range indicative of unknown heavy hydrocarbons.

Hydrocarbons present in gasoline-range indicative of stoddard solvent.

() Laboratory duplicate analysis.

Refer to laboratory reports for detection limits.

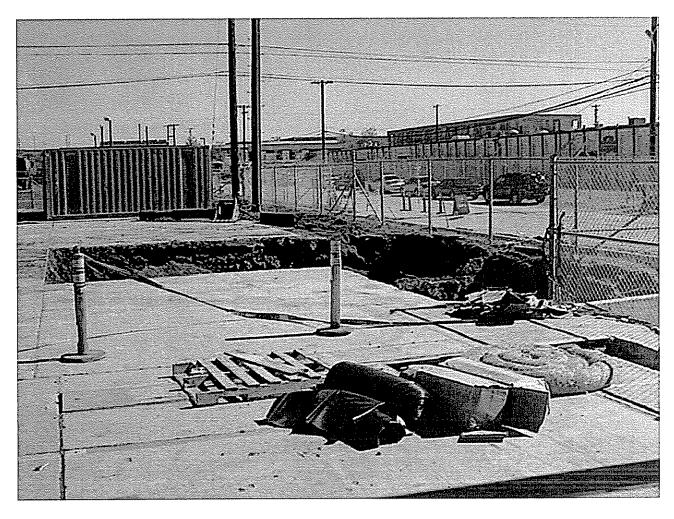
SOURCES:

A Minority Enterprises Inc. (M.E.I) data, dated 26 July 94.

B Ninyo & Moore field assessment November 1999 through January 2000.

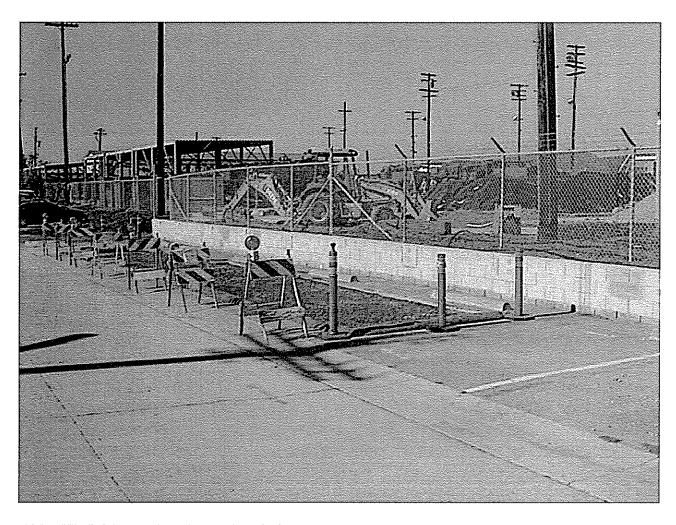
Historical soil results table 1.xls Report Table 1 5 of 5

APPENDIX A



FORMER UST 41319 – Photo taken facing south.

The former tank is located near the corner of the chain link fence, right hand edge of the photo. The top of the retaining wall can be seen running parallel to the chain link fence. Hydrocarbon-impacted soil remains inaccessible beneath the block retaining wall and the storm water pipe. The storm water pipe is located approximately 3 ft to the west of the block retaining wall and runs parallel to the wall.



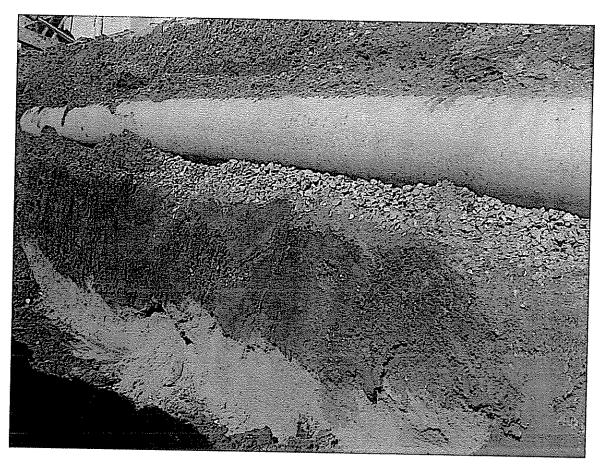
FORMER UST 41319 – Photo taken facing north.

The former tank is located under the rear bucket attached to the backhoe. Hydrocarbon-impacted soil remains inaccessible beneath the storm water pipe and the block retaining wall. The storm water pipe is located approximately 3 ft to the west of the block retaining wall and runs parallel to the wall.



FORMER UST 41319 – View of the retaining wall and storm water pipe.

Hydrocarbon-impacted soil is located beneath the storm water pipe and continues under the wall toward the former tank location.



FORMER UST 41319 - Close-up view of Hydrocarbon-impacted soil located under the storm water pipe.

APPENDIX B

6 = Sodium Thiose RELINQUISHED BY: RELINQUISHED BY/(748 halu Navy Regional Environmental Laboratory
Public Works Center Code 910
Naval Air Station North Island, BLDG-M9
San Diego, CA 92135 i = Nitric Acid(HNO3) 2 = Hydrochlone Acid(HCI) 3 = Sulfuric Acid(H2SO4) 4 = Sodium Hydroxide(NaOH) 5 = 7 COMMENTS: RELINQUISHED BY: 12397-61 ए (PRINT & SIGN) Phone: (619)545-8431 LOG YIUMBER ALT. CONTACT: (ACEN (PRHIT & SIGH) CAB CONTACT: (COL (> L-) AURESTILL ADDRESS: 2730 ACTIVITY: E-MAIL: Purc CHAIL レスメョ・ NAV NAV-EXZI NAV-CX2 ?S2O3) 7 = Ascorbic Acid(C6H8O6) B.= Sodium Bisulfate(NaHSO4) 9= Monochloroacı · Fax: (619)545-0793 = Location of where the samples(s) were collected. SAMPLE IDENTIFICATION R-CANO Cose 980 McKeys ST $Col(L_{L})$ MAURES M50 3 1 RESULTS DELIVERY: かんと THICKED UP Other 1/1/64 11/11/04 COLLECTED 11/1/04 DATE PHONE: PHONE: 6/9-57/-4/72 LABORATORY CHAIN-OF-CUSTODY Ă. 1250 1750 COLLECTED 1250 TIME -6000 CUSTOMER DUE DATE: 11-17-64 AX SAMPLED BY (PRINT): RECEIVED BY (705 En év) RECEIVED BY: PROJECT NAME: 05 RECEIVED BY 5016 501 L (PRINT & SIGN) (HOIS & THIRM) SAMPLE (HSIS & SIGH) JOB ORDER #: MATRIX Iraily HAVERSHULL TOPH 41 3623502002 ale(ZnC2H3O2) 22H3O2Cl) NA = Not applicable 10 = Other Χ 8015 \times 41319 R-CRUZ ス 8015 M COOLER TEMP: FED EX. TRACKING # CORRECT CONTAINER RECEIVED ON TOE PRESERVED SEAL INTACT: PRESERVATION CODE/BOTTLE CODE DATE DATE DATE CHECK REGULATORY PROGRAM

MASTE/GROUNDWATER/LUFT(RCRA) ABATEMENT (HUD) DISCHARGE (NPDES/CWA) DRINKING WATER (SDWA) ANALYSIS REQUESTED degrees 0 0 0 0 4 4 4 4 Š NA E OTHER THE RUSH SURCHARGE © OTHER (FYB USE ONEX) O NAVY R PROJ. # 1911-O TIME: TIME: 0900 TIME Scur Form . □ BAO-T-Form Others Effeld notes 000 ON TO ਼ੁ Number of Containers/Sample

	Píckup	Return to client	Disposal @ \$2.00 each	Dispos	Sample disposal instrucción.	Sample dist	n on back.	acceptance of condition	vith analysis and	on to proceed w	Signature constitutes authormon to proceed with analysis and acceptance of condition on back.	<u>ئ</u> إ
-Car	Date:	(company)	1-1111-0-0-0-0-0-1111-0-0-0-0-0-0-0-0-0	Marketine of the control of the cont	γ: (Signatı·	Received by: (Signativ	(company)	{con		The state of the s	Relinquished by: (Signatur	R
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					lacksquare	×	←	« «			13-4-	1
									35	R	41319 - EX2	Ĭ
									25	8	4,3,9-Ex2	T
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									1300	18-1.5 1	41319 - EX18	#
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									145 1	Do-	4319-EX4	本
									100	S	4/319-EX 2	4
	7.								100		41319-EX 2B	耳
	Additional		AND						1000		41319-EX10S	耳
									1000		41319-EX108	试
					X	X	JAR	19 SOIL	1100 101		11319-Ex2-	文
Total #	Field Notes		VOC s Metha Fixed	Oxyge VOC s	8021 f		Container Type	Sample te Type	Time Date	Depth	Sample	
of contact	Intact: ☐ Yes ☐ No Seal Intact: ☐ Yes ☐ No ☐ N/A Cold: ☐ Yes ☐ No N/A (Received on Site)		***************************************	;	or BTEX/MTBE or Halogenated compou	1 pasoline / diesel extended]			
	Sample Receipt			8260B	nds		TYPOTO THE HEAD OF THE PARTY OF	***************************************			Notes:	z
				73	Tur	6000	524-0	Fax: 619-	200	1-425	Phone: 619-311	وا
000	dleton Ar	C_{P}	# 4/3/	17	Loca	36	92/	CA	11000		San	
tok	aner C. Haversi	Project Manager	7200	ect#	Clie			H ts	ckean	O Mc	Address: 273	
	Of	₹ Pane:	Haversho	Collector: O. H	Coll			Works	5/10	Pul	client: Mary	Ω

148 S. Vinewood St., Escondido, CA 92029 • ph 760.735.3208 • fax 760.735.2469
432 N. Cedros Ave., Solana Beach, CA 92075 • ph 858.793.0401 • fax 858.793.0404
2373 208th Street Unit F-1, Torrance, CA 90501 • ph 310.782.2929 • fax 310.782.2798

Chain of Custody Record

Date: 10-19-04 M HPL Project # ND 1019 D4 M

Outside Lab: _

Ċ ひかてもろもかなる \$ 2 \bar{Q} 3411001 Relinquished by: (Signature) Relinquished by: (Signature) Relinquished by: (Signature) Com. () Aww. +() C Phone: Client: NOVY PWC Signature constitu Global ID: Address 41319-Ex01 Sample Name -EX03 ろりり -EYO9 ーでなのち 也吗 文13 - DX-II でり M M3 -E406 15 P **でた** Enal 105 to a 101 rization to proceed with analysis and acceptance of condition on back. Field Point Name 2373 208th Street Unit F-1, Torrance, CA 90501 • ph 310.782.2929 • fax 310.782.2798 Depth ШDТ 240 1300 (company) 38) 8 7005 0930 250 000 かな 1015 1010 2.Kg 0/11/5/20 Time Yes / No Date Sample dispo Received by: (Signature) Réceived by: (Signature N/A Received on Site Seal Intact: ☐ Yes ☐ No ☐ N/A Sample Receipt Cold: O Yes O No Intact: Xyes D No Sample Type 402 Container Type tion. Location: (any) kndle fix Client Project # 136170308/10/4134 Diject Manager Collector: L'COUR HOURISTEL Turn around time: TPH gasoline / diesel 又 Disposal @ \$2.00 each X|X× TPH extended 8021 for BTEX/MTBE 8021 for Halogenated compounds 418 1 TRPH BTEX / Oxygenates 8260B Return to client Oxygenates Arra 41 VOC's (company)__ (company) VOC's and Oxygenates Methane Fixed Gases ☐ Pickup 8 Time: Total # of containers

MOBILE GEOCHEMISTRY

148 S. Vinewood St., Escondido, CA 92029 • ph 760.735.3208 • fax 760.735.2469

H&P Project # N91100+13

Outside Lab:

Date: 11/11/04

Chain of Custody Record

432 N. Cedros Ave., Solana Beach, CA 92075 • ph 858.793.0401 • fax 858.793.0404

VΥ						
41319- 5719	Sample Name	Global ID:	Phone:	Address:	Client Now PWC	MOBILE GEOCHEMISTR

432 N. Cedros Ave., Solana Beach, CA 92075 • ph 858.793.0401 • fax 858.793.0404 2373 208th Street Unit F-1, Torrance, CA 90501 • ph 310.782.2929 • fax 310.782.2798

148 S. Vinewood St., Escondido, CA 92029 • ph 760.735.3208 • fax 760.735.2469

Chain of Custody Record

Date: 11/1/04

H&P Project # NIP(1004-13

Outside Lab: __

*Signature constitu szation to	Relinquished by: (Signature)							And the second s					WIND AND ADDRESS OF THE PROPERTY OF THE PROPER	REND- 4	41319- 8719	Sample Name					Global ID:	Phone:	The state of the s	S;	client Noughuc
ization to proceed with analysis and acceptance of condition on back.		_	margaph chan	The state of the s	***************************************							7-031444444				Field Point Name						Fax: _)(
ance of condi	(0)	(0	PWCSP													Depth					EDF		***************************************		
lion on bac	(company)	ompany)	Sp)											245	245	Time					EDF: Yes / No	***************************************			
														E .	E/	Date			~~~		ō				
Sample dispos	Received by: (Signature)	Received by: (Sign	Received by: (Signature)	7				***************************************				**************************************		\	80.	Sample Type	N/A (Received on Site)	Cold: 🗆 Yes 🗀 No	Seal Intact: O Yes O No O N/A	Intact: ☐ Yes ☐ No	Sample Receipt		in the control of the		
on:	nature)	nature)	nature)	,	**************************************	1 Are and Areas			Andreet Control of Control	***************************************	** ***			4	402	Container Type	n Site)	ō	≥s □ No □ N/A	N _o	ipt	— Turn around time:	Location: Ca inc	Client P	Collector: Oraya
		ı	245				 **********									трн д			sel			ound tim	8	roject#	
Disposal @ \$2.00 each			,											*	~	TPH e			BE			ie:	6	130	2
@ \$2.00				***************************************			 		····	ļ						8021 fc				ompou	nds		75	Ho	
each							 									418.1	İRPH						2	Ave of	
											······································					BTEX		enale	s		ω		(Vatory		
☐ Ref	6	Ω	79													Oxyge VOC's					8260B		۶	Hank 41329	
Return to client	(company)	(company)	ASTA THE													VOC's	and O	xyger	ates	······································			2	رکر ا	Page:
lient		1	20					·····								Methar	ne						mag	Project Manager	œ
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Pickup	Date:	Date:	V				 			 											_				J
g		4	0/2				 																	15 Va	$ \Upsilon $
•			7													·········				***************************************				ζ, 3,	오
ĺ	Time:	Time:																		·····			4	0, 1	Y
		•	$ \mathscr{E} $				 			 										·/····					
																Total #	of con	lainer	S					•.,	

6



THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prespribed by Chapter 7 (commencing with Section 12700) of authority of accuracy, as prespribed by Chapter 7 (commencing with Section 12700) of authority of accuracy, as prespribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurements Blandards of the California Department of Food and Agriculture of Measurements Blandards of the California

Delivered To & Weighed At:

	nolo Enni		
Weighed For:	Acls Envi	30-16	Gamerator
APN: QUA	33 Manif	est No.	
[2]	JO 96	(gf4	
Carrier:			
Truck License	No. CDS	1.84	
Truck Trailer	No (2 TO	<u>4500</u>	,
	Commodity: Non-Hazare	dous Soll/Meterial	
		34.61	
whome:	[] GROSS:	1112+	
	[] TARE:	174-57	, <u>, , , , , , , , , , , , , , , , , , </u>
	ŕ	24,92	
	NET TONS:		
	environmental -	Weighmaster	
Gross & Tar	A VI	, _v _	
	- June 1	with the same of t	Deputy
Ву:		11-000	
		and the same of th	Date Weigher

CANDELARIA ENVIRONMENTAL

Nº 38796

BIOTREATMENT FACILITY NON-HAZARDOUS MATERIALS HAULING MANIFEST

1	NAME: AC/S ENVIRONMENTAL SECURITY (SITE 41319)
-	ADDRESS: P.O. BOX 555008 PHONE NO (760) 725-9752
g	AC/S ENVIRONMENTAL SECURITY (SITE 41319) ADDRESS: P.O. BOX 555008 PHONE NO (760) 725-9752 CITY. STATE, ZIP CAMP PENDLETON, CA 92055 APN. 2004-93
E	
N	WASTE DESCRIPTION NON-HAZ SOTI, GENERATING PROCESS UST LEAKS
E	COMPONENTS OF WASTE (PPM) COMPONENTS OF WASTE (PPM)
A	COMPONENTS OF WASTE (TIM)
A	PETROLEUM-CONTAMINATED SOIL
T	To the second se
٥l	The second secon
R	PROPERTIES: SOLID YES
"	HANDLING INSTRUCTIONS WEAR APPROPRIATE CLOTHING
	HANDLING INSTRUCTIONS WEAR ACTROPHIATE OLUTHING
ŀ	
	GENERATOR CERTIFIES THAT THESE WASTES ARE FICHA NON-HAZARDOUS, AND CALIFORNIA NON-
Ì	HAZARDOUS, BASED ON THE INFORMATION PROVIDED BY THE GENERATOR ON THE SOIL ACCEPTANCE
Ì	APPLICATION AND THE ACCOMPANYING LABORATORY DATA
	BYK 1 Le Kim Bergeron DATE: 11 8-04
,	
	Signature / Print or Type Full Name
i	COMPANY NAME BUDS PHONE NO (6/9) 443-4200
., [ADDRESS PO, SOX 1521 SERVICE ORDER NO.
H	ADDRESS PO, BOX 152 SERVICE ORDER NO. CITY, STATE, ZIP LAKES DE PICK UP DATE 1/-8-04 TRUCK TYPE: DUMP ROLL OFF OTHER
A	TRUCK TYPE: DUMP / ROLL OFF OTHER
U	
	TRUCK LIC. # CP55864 TRUCK ID # 966-14
E	•
R	DRIVER NAME JOHN STARK TRAILER LIC # 5784086
	DRIVER SIGNATURE TRAILER ID # 966-147
	TIME LEFT JOB 7:50 LOAD # 1
Р	TIME CLY 1 SEE
R	JOB SITE REPRESENTATIVE Aveil JACK
Ö	Name Signature
C	ivallie bigliature
E	
S	Dallyar to facility Lagration
S	Deliver to facility Location: Main office; CANDELARIA ENVIRONMENTAL Phone:(619) 696-6207
Ö	CANDELARIA ENVIRONMENTAL Phone:(619) 696-6207 4001 Candelaria Lane FAX (619) 696-5117
~	Anza, CA 92539 24 th Emergency (619) 696-6207
	μ
	(909) 763-0129

CU. 7 YUU. UPL

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on this cartificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commercing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurements Standards of the California Department of Food and Agriculture

Delivered To & Weighed At:

THE WAR THE STREET

Weighed For: HUS ENULY:	
APN: 04-93 Manifest No. 3879	Constate
Carrier: 15000 966-15	
Truck License No. CP 647257	T i The purpose of intelling patter The State State Space (Space Space S
Truck Trailer No. UE LI32	
Commodity: Non-Hazerdaus &dii/Material	-
WEIGHTS: []GROSS: 37.0]	
I ITARE:	-
NET TONS: 22/	
Candelaria Environmental - Weighmaster Gross & Tare	
By: Tymal Prinfine	
11-8-04	Deputy
Day	Weighed a

07. 1 200, UF OC-OI PO 21 VUFI

CANDELARIA ENVIRONMENTAL BIOTREATMENT FACILITY

Nº 38797

NON-HAZARDOUS MATERIALS HAULING MANIFEST

	NAME: AC/S ENVIRONMENTAL SECURITY (SITE 41319)
	ADDRESS: P.O. BOX 555008 PHONE NO (760) 725-9752
Ģ	ADDRESS: P.O. BOX 555008 PHONE NO (760) 725-9752 CITY, STATE, ZIP CAMP PENULETON, CA 92055 APN 2004-93
Ē	VIII F C VIII Law C C C C C C C C C C C C C C C C C C C
N	WASTE DESCRIPTION NON-HAZ SOIL GENERATING PROCESS TIST LEAKS
E	COMPONENTS OF WASTE (PPM) COMPONENTS OF WASTE (PPM)
R	
Α	PETROLEUM-CONTAMINATED SOIL
T	
0	The state of the s
R	PROPERTIES: SOLID YES
	HANDLING INSTRUCTIONS: WEAR APPROPRIATE CLOTHING
	GENERATOR CERTIFIER THAT THESE MARKETS ARE BORN MICHAEL AND THE
	GENERATOR CERTIFIES THAT THESE WASTES ARE RCRA NON-HAZARDOUS, AND CALIFORNIA NON-HAZARDOUS, BASED ON THE INFORMATION PROVIDED BY THE GENERATOR ON THE SOIL ACCEPTANCE
	APPLICATION AND THE ACCOMPANYING LABORATORY DATA
	BY Kim Bargaron DATE: 11804
	Signature / Print or Type Full Name
	COMPANY NAME BUDS PHONE NO (6/9) 473 - 4200
Н	ADDRESS PO BOX 1521 SERVICE ORDER NO
A	CITY, STATE, ZIP LAKELOR PICK UP DATE 11-8-04
ΰ	TRUCK TYPE: DUMP X ROLL OFF OTHER
L	1 100 100 100 100 100 100 100 100 100 1
E	TRUCK LIC # CP 64237 TRUCK ID # 966-15
R	
	DRIVER NAME SMITT GLOVER. TRAILER LIC. # 4EL 1324
	DRIVER SIGNATURE TRAILER ID # 966-157
	DRIVER SIGNATURE TRAILER ID # 966-15 T
ĺ	71147 1 11147 1 11147 1 11147
.	TIME LEFT JOB 8:00 LOAD # 2
7	JOB SITE REPRESENTATIVE COME HAVECSTOR CA-
	Name Signature
_	
= 3	Deliver to facility Location: Main office
3	CANDELARIA ENVIRONMENTAL Phone:(619) 696-6207
)	4001 Candelaria Lane FAX (619) 596-5117
	Anza, CA 92539 24 hr Emergency (619) 696-6207
	(909) 763-0129

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighnester, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurements Stendards of the California Department of Food and Agriculture

Delivered To & Weighed At:

Weighed For: ACISEnvir Sor
APN: 04-93 Manifest No. 38798
Carrier: Budo 966-12
Truck License No. Cpubolis
Truck Trailer No. GTS84L8
Commodity: Non-Hazerdous SolVMaterial
WEIGHTS: []GROSS: 37.50
[] TARE: 14.35
NET TONS: 23.24
Candelaria Environmental - Weighmester
By:
11-9-5U
Date Web-And

THIS ICAUL TO THE TO THE TO

CANDELARIA ENVIRONMENTAL BIOTREATMENT FACILITY NON-HAZARDOUS MATERIALS HAULING MANIFEST

Nº 38798

-	NAME: AC/S ENVIRONMENTAL SECURITY ADDRESS: P.O. BOX 555008 CITY, STATE, ZIP CAMP PENDLETON, CA 92	(SITE 41319) PHONE NO (760) 725-9752 2004-93
	WASTE DESCRIPTION NON-HAZ SOIL GE COMPONENTS OF WASTE (PPM) PETROLEUM-CONTAMINATED SOIL	
	PROPERTIES: SOLID YES HANDLING INSTRUCTIONS: WEAR APPROPRIA	TE CLOTHING
	GENERATOR CERTIFIES THAT THESE WASTES ARE F HAZARDOUS, BASED ON THE INFORMATION PROVIDE APPLICATION AND THE ACCOMPANYING LABORATOR	ED BY THE GENERATOR ON THE SOIL ACCEPTANCE
	Signature / Print or Type Full Name	DATE: 11-8-04
	COMPANY NAME BUDS ADDRESS PO BOX 1521 CITY, STATE, ZIP LAICESIDE TRUCK TYPE: DUMP X ROLL OFF OTHE	PHONE NO(6/9) 443 - 420 6 SERVICE ORDER NO. PICK UP DATE 11-8-04
	TRUCKLIC # CP40063	TRUCK ID # 966-12
	DRIVER NAME THE VALLE	TRAILER LIC. # GT 58448
İ	DRIVER SIGNATURE	TRAILER ID # 966-12T
	TIME LEFT JOB 0820	LOAD# 3
)	JOB SITE REPRESENTATIVE COMIG Name	Signature
•	CANDELARIA ENVIRONMENTAL 4001 Candelaria Lane	Main office: Phone:(619) 696-6207 FAX (619) 696-5117 4™ Emergency (619) 696-6207

THIS IS TO CERTIFY that the following described commodity was weighed, measured or coursed by a weighnester, whose eignsture is on this certificate, who is a recognized or coursed by a weighnester, whose eignsture is on this certificate, who is a recognized or commercing with Section 12700) of authority of accuracy, as prescribed by Chapter 7 (commercing with Section 12700) of authority of accuracy, as prescribed by Chapter 7 (commercing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurements Standards of the California Dapartment of Food and Agriculture of Measurements Standards of the California Dapartment of Food and Agriculture

Delivered To & Weighed At:

902-700 - 1	
Weighed For: ACISENVINSON 38799	ř
APN: 04-93 Manifest No. 36-199	-
Carrier: CP40062	~ >
Truck Trailer No. LIEC6780	~ -
Commodity: Non-Hazerdous Soll/Material	
	,
NET TONS: 2290	
Candelaria Environmental - Weighmaster	
Gross & lare	a puty
Delto W	nigred

HUN IZ UH TO OO NU JUZ [, IU

COMPONENTS OF WASTE (PPM)

PHONE NO 2004-93

CANDELARIA ENVIRONMENTAL BIOTREATMENT FACILITY NON-HAZARDOUS MATERIALS HAULING MANIFEST

WASTE DESCRIPTION NON-HAZ SOIL GENERATING PROCESS UST LEAKS

GENERATOR CERTIFIES THAT THESE WASTES ARE RCRA NON-HAZARDOUS, AND CALIFORNIA NON-HAZARDOUS, BASED ON THE INFORMATION PROVIDED BY THE GENERATOR ON THE SOIL ACCEPTANCE

NAME: AC/S ENVIRONMENTAL SECURITY (SITE 41319)

HANDLING INSTRUCTIONS: WEAR APPROPRIATE CLOTHING

CITY, STATE, ZIP CAMP PENDLETON, CA 92055

ADDRESS: P.O. BOX 555008

COMPONENTS OF WASTE (PPM)

PROPERTIES SOLID YES

PETROLEUM-CONTAMINATED SOIL

Nº 38799

(760) 725-9752

HAULER

PROCES

8

M 0-07

APPLICATION AND THE ACCOMPANYING LABORATORY DATA 14 im Bargeron DATE: 14 8 - 64 Signature '/ Print or Type Full Name COMPANY NAME BUES PHONE NO. (619) 443-4200 ADDRESS Po Box 1521 SERVICE ORDER NO. CITY, STATE, ZIP LAKESLOR CA PICK UP DATE 11-8-04 TRUCK TYPE: DUMP X ROLL OFF OTHER TRUCK ID # 966-10 TRUCKLIC # CP40062 ATRAILER LIC. # 4EC 6780 DRIVER NAME TRAILER ID # 966- 10T DRIVER SIGNATURE TIME LEFT JOB 0840 JOB SITE REPRESENTATIVE COALG HAVER STICK Deliver to facility Location: Main office: CANDELARIA ENVIRONMENTAL Phone (619) 696-6207 4001 Candelaria Lane FAX (619) 696-5117 Anza, CA 92539 24^{ht} Emergency (619) 696-6207 (909) 763-0129

TO-OB MOTONS L'TI

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmenter, whose signature is on this certificate, who is a recognized authority of ecouracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurements Standards of the California Department of Food and Agriculture

Delivered To & Weighed At:

Weighed For:			Generalu
APN: OU	-93 Ma	inifest No. 388	<u>3000.</u>
Carrier: 56		B2	
Truck License	No. LAS	1659.	
Truck Trailer I	•		
	Commodity: Non-Hai		
		20 -	
WEIGHTS:	[]GROSS:		—
	[]TARE:	15.40	
	NET TONS:	7377	10 * 10 · 10 · 10 · 10 · 10 · 10 · 10 ·
Candelaria En	vionmental	- Weighmaster	
Gross & Tare By:	hummed	In from	
			Deputy
		1F8-0U	Dam Welched

G

CANDELARIA ENVIRONMENTAL BIOTREATMENT FACILITY NON-HAZARDOUS MATERIALS HAULING MANIFEST

Nº 38800

F	NAME: AC/S ENVIRONMENTAL SECURITY (SITE 41319)
	ADDRESS: P.O. BOX 555008 PHONE NO. (760) 725-9752
i	NAME: AC/S ENVIRONMENTAL SECURITY (SITE 41319) ADDRESS: P.O. BOX 555008 PHONE NO. (760) 725-9752 CITY, STATE, ZIP CAMP PENDLETON, CA 92055 APN: 2004-93
.	
	WASTE DESCRIPTION NON-HAZ SOIL GENERATING PROCESS UST LEAKS
	COMPONENTS OF WASTE (PPM) COMPONENTS OF WASTE (PPM)
	PETROLEUM-CONTAMINATED SOIL
1	PROPERTIES: SOLID YES
	HANDLING INSTRUCTIONS: WEAR APPROPRIATE CLOTHING
	GENERATOR CERTIFIES THAT THESE WASTES ARE RCRA NON-HAZARDOUS, AND CALIFORNIA NON- HAZARDOUS, BASED ON THE INFORMATION PROVIDED BY THE GENERATOR ON THE SOIL ACCEPTANCE
	APPLICATION AND THE ACCOMPANYING LABORATORY DATA
	BY: K Thura Kini Bergaren DATEN-8-04
,	Signatura Point or Tuna Bull Magna
(
	COMPANY NAME TOT PHONE NO. (U19) 443 - 420 0
Н	ADDRESS PALA CO SERVICE ORDER NO. CITY, STATE, ZIP PALA CA PICK UP DATE //- 18-04
Α	TRUCK TYPE: DUMP X ROLL OFF OTHER
U	
	TRUCK LIC. # 481659 TRUCK ID # 6-2
R	DRIVER NAME JEFF BRAZELATO/FRAILER LIC # 1VT 3240
1	DRIVER SIGNATURE AND MAJELIAN TRAILER ID # 8-24
	TIME LEFT JOB 0855 LOAD # 5
ء ج	JOB SITE REPRESENTATIVE COME HAVERSTICK CAL
כ	Name Signature
3	
CES	
S S	Deliver to facility Location: Main office: CANDELARIA ENVIRONMENTAL Phone;(619) 696-6207
_	4001 Candelaria Lane FAX (619) 696-5117 / /
	Anza, CA 92539 24 T Emergency (619) 696-6207
	(909) 763-0129
	V = V

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose algoriture is on this pertificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Massurements Standards of the California Department of Food and Agriculture

Delivered To & Weighed At:

Weighed For: ACISENDIC.Sec			
APN: OLI-CR Manifest No. 3660			
Carrier: JBT 3-1			
Truck License No. 58 1123/78			
Truck Trailer No. 21(83355			
Commodity: Non-Hazardous Soit/Meterial			
WEIGHTS: [] GROSS: 3 8.38			
[]TARE:			
NET TONS: 2282			
Candelaria Environmental - Weighmaster			
By:			
11-8-04 Detailed			

CANDELARIA ENVIRONMENTAL BIOTREATMENT FACILITY NON-HAZARDOUS MATERIALS HAULING MANIFEST

F	NIABAC, AC/C ENVIRONMENTAL SECURITY (STTE 41319)		
	NAME: AC/S ENVIRONMENTAL SECURITY (SITE 41319) ADDRESS: P.O. BOX 555008 PHONE NO (760) 725-9752 CITY STATE ZIP CAMP PENDLETON, CA 92055 APN: 2004-93		
,	ADDRESS: P.O. BOX 555008 PHONE NO. 2004-93 CITY, STATE, ZIP CAMP PENDLETON, CA 92055 APN: 2004-93		
	UII 1, OFFIFE WILL AND THE STATE OF THE STAT		
v	WASTE DESCRIPTION NON-HAZ SOIL GENERATING PROCESS UST LEAKS		
=	COMPONENTS OF WASTE (PPM) COMPONENTS OF WASTE (PPM)		
₹			
Δ]	PETROLEUM-CONTAMINATED SOIL		
<u> </u>			
2			
7	PROPERTIES: SOLID YES WEAR APPROPRIATE OF OTHING		
ļ	HANDLING INSTRUCTIONS WEAR APPROPRIATE CLOTHING		
	GENERATOR CERTIFIES THAT THESE WASTES ARE RCRA NON-HAZARDOUS, AND CALIFORNIA NON- HAZARDOUS, BASED ON THE INFORMATION PROVIDED BY THE GENERATOR ON THE SOIL ACCEPTANCE		
	APPLICATION AND THE ACCOMPANYING LABORATORY DATA		
	BY: C Buy Min Borgaron DATE 11-8-04		
	Signature / Print or Type Full Name		
	COMPANY NAME JGT PHONE NO (619) 443-4200 ADDRESS PALA (CO SERVICE ORDER NO.		
Н	ADDRESS PALA ILO SERVICE ORDER NO.		
n A	CITY, STATE, ZIP PALA CA PICK LIP DATE 11-8-04		
Û	TRUCK TYPE: DUMP X ROLL OFF OTHER		
Ĺ			
Ε	TRUCK LIC # 2 K 8 3 0 5 5 TRUCK ID # B-1		
R	DRIVER NAME Roberto Villa and TRAILER LIC. # YD 3178		
	DELIVER INCHES TO DAY TO VIII TO TO THE TO THE TO THE TO THE TOTAL TOT		
	DRIVER SIGNATURE TRAILER ID # 8-1A		
	TIME LEFT JOB 0905 LOAD # 6		
P	1		
R	JOB SITE REPRESENTATIVE CRAIG HAVERSTICK CAL		
Ö	Name Signature .		
C			
E S	Deliver to facility Location. Main office:		
S	CANDELARIA ENVIRONMENTAL Phone: (619) 696-6207		
Ω O	4001 Candelaria Lane FAX (619) 598-5117		
	Anza, CA 92539 24 th Emergency (619) 696-6207		
	(951) 763-0129		
	W/		

1,30

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighnester, whose signature is on this certificate, who is a recognized authority of socuracy, as prescribed by Chapter 7 (commencing with Section 1270b) of Division 5 of the California Business and Professions Cods, administered by the Division of Measurements Standards of the California Dapartment of Food and Agriculture

Delivered To & Weighed At:

The state of the s

Weighed For: ACIS Envir	Soul
APN: 04-98 Manifest	No. 38802
Carrier: Budo 9	66-14
Truck License No. CO5	564
Truck Trailer No	
Commodity: Non-Hazardous Sc	
WEIGHTS: [] GROSS:	38,94
[] TARE:	4.35
NET TONS:	2464
Candelaria Environmental - Weig	hmaster
Gross & Tare By: Lynna Mu	mfen
/1.	-8-2U
The state of the s	Date William

10 445 NO 105 1 TTO

CANDELARIA ENVIRONMENTAL BIOTREATMENT FACILITY

NON-HAZARDOUS MATERIALS HAULING MANIFEST

f	NAME AC/S ENVIRONMENTAL SECURITY (SITE 41319)
ļ	P = 0.000 P 0 R0Y 555008 PHONE NO (760) 725-9752
G	ADDRESS: P.O. BOX 555008 PHONE NO (760) 725-9752 CITY, STATE, ZIP CAMP PENDLETON, CA 92055 APN: 2004-93
ENERATOR	WASTE DESCRIPTION NON-HAZ SOIL GENERATING PROCESS UST LEAKS COMPONENTS OF WASTE (PPM) PETROLEUM-CONTAMINATED SOIL
	PROPERTIES: SOLID <u>YES</u> HANDLING INSTRUCTIONS: WEAR APPROPRIATE CLOTHING
The second secon	GENERATOR CERTIFIES THAT THESE WASTES ARE RORA NON-HAZARDOUS, AND CALIFORNIA NON-HAZARDOUS, BASED ON THE INFORMATION PROVIDED BY THE GENERATOR ON THE SOIL ACCEPTANCE APPLICATION AND THE ACCOMPANYING LABORATORY DATA
1	Signature / Print or Type Full Name
ı. T	
	ADDRESS PO BOX 1521 SERVICE ORDER NO.
H	CITY, STATE, ZIP LAKE SIDE PICK UP DATE 11-08-04
A	TRUCK TYPE: DUMP X ROLL OFF OTHER
LE	TRUCK LIC. # CP55864 TRUCK ID # 966-14
R	DRIVER NAME The W. Shull TRAILER LIC. # GT 84086
	DRIVER SIGNATURE LO D TRAILER ID # 966-14T
P	TIME LEFT JOB 1230 LOAD # 7
ROCE	JOB SITE REPRESENTATIVE COALG HAVECSTICK Signature
900	Deliver to facility Location. CANDELARIA ENVIRONMENTAL 4001 Candelaria Lane Anza, CA 92539 (951) 763-0129 Main office: Phone;(619) 696-6207 FAX (619) 696-5117 24 ** Emergency (619) 696-6207

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on this certificate, who is a recognized suthority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurements Standards of the California Department of Food and Agriculture

Delivered To & Weighed At:

Weighed For: ACISENVINSOU
APN: OU-93 Manifest No. 58853
Carrier: Budo 96675
Truck License No. OP 6473
Truck Trailer No. CIEU314
Commodity; Non-Hazardous Soil/Material
WEIGHTS: []GROSS: 4017
1 TARE: 1484
NET TONS: 25.93
Candelaria Environmental - Weighmaster Gross & Tare
By: Deputy
11-8-0 C

TE OH TOTHO HOLOGE 1.10

CANDELARIA ENVIRONMENTAL BIOTREATMENT FACILITY NON-HAZARDOUS MATERIALS HAULING MANIFEST

Nº 38803

NAME: AC/S ENVIRONMENTAL SECU	IDTTV (CITE A1210)
ADDRESS: P.O. BOX 555008	PHONE NO (760) 725-9752
ADDRESS: P.O. BOX 555008 CITY, STATE, ZIP CAMP PENDLETON,	PHONE NO. (760) 725-9752 APN: 2004-93
WASTE DESCRIPTION NON-HAZ SOIL COMPONENTS OF WASTE (PPM) PETROLEUM-CONTAMINATED SOIL	II. GENERATING PROCESS <u>UST LEAKS</u> COMPONENTS OF WASTE (PPM)
PROPERTIES: SOLID <u>YES</u> HANDLING INSTRUCTIONS: <u>WEAR APP</u>	PROPRIATE CLOTHING
APPLICATION AND THE ACCOMPANYING LAB	
BY: K By Kin Bargar Signature / Print or Type Full Name	DATE: 11-8-04
COMPANY NAME QUDS	PHONE NO (619) 443-4200
ADDRESS VA K	CEDIMOR ODDED NO
CITY, STATE, ZIP LAKESIDE CA	PICK UP DATE US COR TO V
TRUCK TYPE: DUMP X ROLL OFF	
TRUCK LIC. # CP55964 CAN	TRUCK ID # 966-15
DRIVER NAME SYMMETT GLOVE	PR TRAILER LIC # 966-13C4H LEL 132
DRIVER SIGNATURE	TRAILER ID # 966-157
TIME LEFT JOB 1240	LOAD# 8
JOB SITE REPRESENTATIVE CIMG	HAVERSTICK C
Name	Signature
Deliver to facility Location: CANDELARIA ENVIRONMENTAL 4001 Candelaria Lane Anza, CA 92539	Main office: Phone:(619) 696-6207 FAX (619) 696-5117 24 tr Emergency (619) 696-6207

PROCESSO

(951) 763-0129

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PAGE 12

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commercing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurements Standards of the California Department of Food and Agriculture

Delivered To & Weighed At:

Candelaria Environmental - Weighmaster 4001 Candelaria Lane Anza, California 92539 909-763-0129

Weighed For: ACISTANINSOC			
APN: OLI-03 Manifest No. 38304			
Carrier: Bul 96(-17			
Truck License No			
Truck Trailer No G-758448			
Commodity: Non-Hazardous Soil/Material			
[] TARE: 143)			
NET TONS: 24.75			
Candelaria Environmental - Weighmaster Gross & Tare By:			
11-86-01			
Date Weighted			

√.n".

Nº

CANDELARIA ENVIRONMENTAL

BIOTREATMENT FACILITY
NON-HAZARDOUS MATERIALS HAULING MANIFEST

	NAME ACIS ENVIRONMENTAL OFFICE ACID ACID ACID ACID ACID ACID ACID ACID
	NAME AC/S ENVIRONMENTAL SECURITY (SITE 41319)
G	ADDRESS: P.O. BOX 555008 CITY, STATE, ZIP CAMP PENDLETON, CA 92055 APN: 2004-93
E	CITY, STATE, 21P - 1000 1000, CA 92033 APN: 2004-93
Ν	WASTE DESCRIPTION NON-HAZ SOIL GENERATING PROCESS UST LEAKS
E	COMPONENTS OF WASTE (PPM) COMPONENTS OF WASTE (PPM)
R	Whate (FFM)
Α	PETROLEUM-CONTAMINATED SOIL
T	
0	
R	PROPERTIES: SOLID YES
	HANDLING INSTRUCTIONS, WEAR APPROPRIATE CLOTHING
	GENERATOR CERTIFIES THAT THESE WASTES ARE RCRA NON-HAZARDOUS, AND CALIFORNIA NON-
	I TOPOTO DO DO DE LO TOPO DE LA COMPLETA DEL COMPLETA DE LA COMPLETA DE LA COMPLETA DE LA COMPLETA DE LA COMPLETA DE LA COMPLETA DE LA COMPLETA DE LA COMPLETA DE LA COMPLETA DE LA COMPLETA DE LA COMPLETA DE LA COMPLETA DE LA COMPLETA DELOCACION DEL COMPLETA DEL COMPLETA DEL COMPLETA DEL COMPLETA DEL C
	APPLICATION AND THE ACCOMPANYING LABORATORY DATA
	BY: K Buy Kin Berperon DATE: 11-8-04
	DATE: 11-8-04
	Signature / Print or Type Full Name
	COMPANY NAME BUSS PHONE NO. (6/9) 443-4300
Н	ADDRESS PO BOX 1521 SERVICE ORDER NO
A	CITY, STATE, ZIP CAKES, DE CA PICK UP DATE 11-18-04
U	TRUCK TYPE: DUMP X ROLL OFF OTHER
L	147 day) if add Industry.
E	TRUCK LIC # CP40063 TRUCK ID # 966-12
R	The state of the s
	DRIVER NAME TRAILER LIC # GT 58448
	DRIVER SIGNATURE
	DRIVER SIGNATURE TRAILER ID # 966-12 T
	TIME LEFT JOB 1300
Р	TIME LEFT JOB 1300 LOAD # 9
R	JOB SITE REPRESENTATIVE Craig Havenstick C
0	
C	Name Signature
E	
S	Deliver to facility Location: Main office:
S	CANDELARIA ENVIRONMENTAL Phone (619) 595-5207
0	4001 Candelaria Lane FAX (619) 696-5117
Γ '	Anza, CA 92539 24 ^M Emergency (619) 696-6207
1	(951) 783-0129
, l	ω

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WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighnester, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurements Standards of the California Department of Food and Agriculture

Delivered To & Weighed At:

Weighed For: Acls Envir Sou
APN: 04-93 Manifest No. 3880
Carrier: Budo 966-10
Truck License No. CPUSOB
Truck Trailer No. 4EC6780
Commodity: Non-Hazardous Soil/Material
WIIGHTS: []GROSS: 39.74
1 TARE: 1439
NET TONS: 25.35
Candelaria Environmental - Weighmaster Gross & Tare
11-8-0U
Data Weight

CANDELARIA ENVIRONMENTAL BIOTREATMENT FACILITY

NON-HAZARDOUS MATERIALS HAULING MANIFEST

à	NAME. AC/S ENVIRONMENTAL SECURITY (SITE 41319) ADDRESS: P.O. BOX 555008 PHONE NO. (760) 725-9752 CITY, STATE, ZIP CAMP PENDLETON, CA 92055 APN: 2004-93
17 II 7 4 F	WASTE DESCRIPTION NON-HAZ SOIL GENERATING PROCESS UST LEAKS COMPONENTS OF WASTE (PPM) PETROLEUM-CONTAMINATED SOIL
O A	PROPERTIES: SOLIDYES
	GENERATOR CERTIFIES THAT THESE WASTES ARE RCRA NON-HAZARDOUS, AND CALIFORNIA NON-HAZARDOUS, BASED ON THE INFORMATION PROVIDED BY THE GENERATOR ON THE SOIL ACCEPTANCE APPLICATION AND THE ACCOMPANYING LABORATORY DATA
	BY: 12 By
H A U	COMPANY NAME BUDS ADDRESS DO BOX 1521 CITY, STATE, ZIP LAKESLOE CA TRUCK TYPE: DUMP X ROLL OFF OTHER PHONE NO (619)- 443-4200 SERVICE ORDER NO PICK UP DATE 11-08-04
L E	TRUCK LIC. # <u>CP46062'</u> TRUCK ID # <u>966-10</u>
R	DRIVER NAME BUCK-AAM TRAILER LIC. # 4EC6780
	DRIVER SIGNATURE BERILD # 966-10 T
PROC	TIME LEFT JOB 1310 LOAD # 10
	JOB SITE REPRESENTATIVE C CALL HOURISTICK CALL Signature
ESSC	Deliver to facility Location: CANDELARIA ENVIRONMENTAL 4001 Candelaria Lane Anza, CA 92539 (951) 763-0129 Main office: Phone:(619) 696-6207 FAX (619) 696-5117 24*** Emergency (619) 696-6207

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of socuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurements Standards of the California Department of Food and Agriculture

Delivered To & Weighed At:

Woighad For	Acls Envir	r.Sec		
Waldilan ou	Manife	10 8806		
APN: DUE	Manite	NO.		
Carrier:	51	15-6	,	
	No. 4881	654.		
Truck License	101	3010		
Truck Trailer	10.	740		
	Commodity: Non-Hezerdo	us Boil/Material		
	[] GRO\$S: _	\sim 6, ∞	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
MEIGHTS:		1500		
	[] TARE:	7001		
	NET TONS: _	16360	-	
Candelaria E	nvironmental - V	√ .e Λθιβυωααται		
Gross & Tare	Lynno I	lunfores	Deput	
Dy		11-8-04		
		Date W	Jelohe	

M 9-9Y

CANDELARIA ENVIRONMENTAL BIOTREATMENT FACILITY

NON-HAZARDOUS MATERIALS HAULING MANIFEST

	NAME: AC/S ENVIRONMENTAL SECURITY (SITE 41319)
_	ADDRESS: P.O. BOX 555008 PHONE NO. (760) 725-9752 CITY, STATE, ZIP CAMP PENDLETON, CA 92055 APN: 2004-93
G	CITY, STATE, ZIP CAMP PENDLETON, CA 92055 APN: 2004-93
ENERAT	WASTE DESCRIPTION NON-HAZ SOIL GENERATING PROCESS UST LEAKS COMPONENTS OF WASTE (PPM) PETROLEUM-CONTAMINATED SOIL
ò	
R	PROPERTIES: SOLID YES
	HANDLING INSTRUCTIONS: WEAR APPROPRIATE CLOTHING
!	GENERATOR CERTIFIES THAT THESE WASTES ARE RCRA NON-HAZARDOUS, AND CALIFORNIA NON-HAZARDOUS, BASED ON THE INFORMATION PROVIDED BY THE GENERATOR ON THE SOIL ACCEPTANCE APPLICATION AND THE ACCOMPANYING LABORATORY DATA
	BY L Ben Kim Bergeron DATE: 11-8-04
	Signature / Print or Type Full Name
	COMPANY NAME ST PHONE NO (CUA) CUT LOS
Н	COMPANY NAME JBT PHONE NO. (6/9)-443-4200 ADDRESS POLA RD SERVICE ORDER NO
Α	CITY, STATE, ZIP DALA CA PICK UP DATE 11-08-04
U	TRUCK TYPE: DUMP X ROLL OFF OTHER
L E	TRUCKLIC # 4181657 TRUCKID# B-2
R	TELE DOSSELLY
	DRIVER NAME JEFF BRAZELTA AVILER LIC # 1VT3240
	DRIVER SIGNATURE LAST STATE LIGHT TRAILER ID # 8-24
-	TIME LEFT JOB 7325 LOAD# 1/
7	
5	JOB SITE REPRESENTATIVE Cras & Haver Street ('A
	Name Signature
5	Deliver to facility Location: Main office: CANDELARIA ENVIRONMENTAL Phone:(619) 696-6207
5	### CANDELARIA ENVIRONMENTAL Phone:(619) 696-6207 ####################################
*.	Anza, CA 92539 24 Emergency (619) 696-6207
	(951) 763-0129
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WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighnester, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commercing with Section 12700) of Division 6 of the Colifornia Businuss and Professiona Code, edministered by the Division of Measurements Standards of the Colifornia Department of Food and Agriculture

Delivered To & Weighed At:

Weighed For: ACLS Envir Soc
APN: EXT 03 Manifest No. 388 397
Carrier: JBT B-1
Truck License No. 2(83)55
Truck Trailer No.
Commudity: Non-Hazardous Boll/Material WEIGHTS: [] GROSS:
Gross & Tare By: Deputy Deputy Deputy

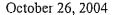
FHUL UD

CANDELARIA ENVIRONMENTAL BIOTREATMENT FACILITY

NON-HAZARDOUS MATERIALS HAULING MANIFEST

	LAST LOAD CLOAN UP
<u>~</u>	NAME: AC/S ENVIRONMENTAL SECURITY (SITE 41319) ADDRESS P.O. BOX 555008 PHONE NO (760) 725-9752 CITY, STATE, ZIP CAMP PENDLETON, CA 92055 APN: 2004-93
G E N	
E A	WASTE DESCRIPTION NON-HAZ SOIL GENERATING PROCESS UST LEAKS COMPONENTS OF WASTE (PPM) PETROLEUM-CONTAMINATED SOIL
T O	THE TOTAL CONTANTIVATED SOIL
HAULER	PROPERTIES: SOLIDYES
	GENERATOR CERTIFIES THAT THESE WASTES ARE RCRA NON-HAZARDOUS, AND CALIFORNIA NON-HAZARDOUS, BASED ON THE INFORMATION PROVIDED BY THE GENERATOR ON THE SOIL ACCEPTANCE APPLICATION AND THE ACCOMPANYING LABORATORY DATA
	BY: K Bergeron DATE: 11-8-00
	COMPANY NAME JOT PHONE NO. 6/9 443 4200 ADDRESS PALA RD SERVICE ORDER NO.
	TRUCK TYPE. DUMP ROLL OFF OTHER
	TRUCK LIC. # 2x83055 TRUCK ID # 8-1
••	DRIVER NAME Nober to Villelando TRAILER LIC # Y03178
	DRIVER SIGNATURE TRAILER ID # B- IA
P R	JOB SITE REPRESENTATIVE CRIG Havenstick C1
OCE	JOB SITE REPRESENTATIVE CRIG Havenstick CA Name Signature
1000 c	Deliver to facility Location: CANDELARIA ENVIRONMENTAL 4001 Candelaria Lane Anza, CA 92539 (951) 763-0129 Main office: Phone:(619) 696-6207 FAX (619) 696-5117 24 *** Emergency (619) 696-6207
, 1	LAST LOAD CLAAN UP







Mr. Craig Haverstick Navy Public Works Center 2730 McKean Street Suite 1 San Diego, CA 92136-5294

SUBJECT: DATA REPORT - TANK 41319 - AREA 41 - CAMP PENDLETON, CA - NAVY PWC PROJECT #11361702008

H&P Project # NP101904W1

Mr. Haverstick:

Please find enclosed a data report for the above referenced location. Soil samples were analyzed on-site in DOHS certified mobile laboratory (CERT #1745).

Project Summary

The following analyses were conducted:

- 13 soils for total recoverable petroleum hydrocarbons (TRPH) by EPA Method 418.1
- 13 soils for total petroleum hydrocarbons (TPH) by DHS LUFT/8015M Method

The samples were received on-site in appropriate containers with appropriate labels, seals, and chain-of-custody documentation

Project Narrative

The results for all analyses and required QA/QC analyses are summarized in the enclosed tables. All calibrations, blanks, surrogates, and spike recoveries fulfill quality control criteria.

H&P Mobile GeoChemistry appreciates the opportunity to provide analytical services to Navy Public Works Center on this project. If you have any questions relating to this data or report, please do not hesitate to contact us

Sincerely,

Hayne Gorbuan Blayne Hartman

 132 North Cedros Avenue. Solana Beach. California 92075
 F
 858 793 0401
 — Fax 858 793 0404

 148 South Vinewood Street, Escondido. California 92029
 Foc 735 3208
 — Fax 760 735 2469

 2373 208th Street. Suite F-1. Torrance. California 90501
 310 782 2929
 — Fax 310 782 2798

www HandPmg.com r 1-800-834-9888

11/2



Project: NP101904-W1

2730 McKean Str , Suite 1 San Diego CA , 92136-5294 Project Number: 11361702008; Tank 41319 Project Manager: Mr Craig Haverstick Reported: 26-Oct-04

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
41319-EX 2-5	W410007-01	Soil	19-Oct-04	19-Oct-04
41319-EX 10B	W410007-02	Soil	19-Oct-04	19-Oct-04
41319-EX 10S	W410007-03	Soil	19-Oct-04	19-Oct-04
41319-EX 2B	W410007-04	Soil	19-Oct-04	19-Oct-04
41319-EX 2S	W410007-05	Soil	19-Oct-04	19-Oct-04
41319-EX 4B	W410007-06	Soil	19-Oct-04	19-Oct-04
41319-EX 4S	W410007-07	Soil	19-Oct-04	19-Oct-04
41319-EX 7B	W410007-08	Soil	19-Oct-04	19-Oct-04
41319-EX 18-1 5	W410007-09	Soil	19-Oct-04	19-Oct-04
41319-EX 18S	W410007-10	Soil	19-Oct-04	19-Oct-04
41319-EX 18B	W410007-11	Soil	19-Oct-04	19-Oct-04
7-EX 20B	W410007-12	Soil	19-Oct-04	19-Oct-04
19-EX 20S	W410007-13	Soil	19-Oct-04	19-Oct-04



Project: NP101904-W1

2730 McKean Str , Suite 1 San Diego CA , 92136-5294 Project Number: 11361702008; Tank 41319 Project Manager: Mr Craig Haverstick Reported: 26-Oct-04

Soil Analyses

H&P Mobile Geochemistry Lab W1

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
41319-EX 2-5 (W410007-01) Soil	Sampled: 19-Oct-04	Received:	19-Oct-04						
TRPH	19	10	mg/kg	1	WJ42001	19-Oct-04	19-Oct-04	EPA 418 1	
Gasoline (C5-C11)	ND	10	"	**	11	\$1	19-Oct-04	DHS LUFT	
Diesel (C12-C24)	ND	10	"	#1	It.	\$1	\$1	н	
41319-EX 10B (W410007-02) Soil	Sampled: 19-Oct-04	Received:	19-Oct-04	ļ					
TRPH	15	10	mg/kg	1	WJ42001	19-Oct-04	19-Oct-04	EPA 418 1	
Gasoline (C5-C11)	ND	10	**	It.	\$1	u	19-Oct-04	DHS LUFT	
Diesel (C12-C24)	ND	10	Ħ	II.	*1	lf	u	rr ·	
41319-EX 10S (W410007-03) Soil	Sampled: 19-Oct-04	Received:	19-Oct-04						
TRPH	ND	10	mg/kg	1	WJ42001	19-Oct-04	19-Oct-04	EPA 418 I	
Gasoline (C5-C11)	ND	10	a	11	17	+1	19-Oct-04	DHS LUFT	
Direct (C12-C24)	ND	10	e e	**	(2	11	\$1	и	
EX 2B (W410007-04) Soil	Sampled: 19-Oct-04	Received:	19-Oct-04						
TRPH	17	10	mg/kg	1	WJ42001	19-Oct-04	19-Oct-04	EPA 418 1	
Gasoline (C5-C11)	ND	10	0	**	н	11	19-Oct-04	DHS LUFT	
Diesel (C12-C24)	ND	10	U	67	и	**	tt	**	
41319-EX 2S (W410007-05) Soil	Sampled: 19-Oct-04	Received: 1	9-Oct-04						
TRPH	10	10	mg/kg	1	WJ42001	19-Oct-04	19-Oct-04	EPA 418 1	
Gasoline (C5-C11)	ND	10	n	**	н	It	19-Oct-04	DHS LUFT	
Diesel (C12-C24)	ND	10	n	tł	11	11	H	#	
41319-EX 4B (W410007-06) Soil	Sampled: 19-Oct-04	Received:	19-Oct-04						
TRPH	39	10	mg/kg	1	WJ42001	19-Oct-04	19-Oct-04	EPA 418 1	
Gasoline (C5-C11)	ND	10	B	и	31	11	19-Oct-04	DHS LUFT	
Diesel (C12-C24)	ND	10	"	u	*1	11	*1	II.	



Project: NP101904-W1

2730 McKean Str , Suite I San Diego CA , 92136-5294 Project Number: 11361702008; Tank 41319 Project Manager: Mr Craig Haverstick Reported: 26-Oct-04

Soil Analyses

H&P Mobile Geochemistry Lab W1

							MODIC	LICLI	
Notes	Method	Analyzed	Prepared	Batch	Dilution Factor	Units	Reporting Limit	Result	Analyte
						9-Oct-04	Received: 1	Sampled: 19-Oct-04	41319-EX 4S (W410007-07) Soil
	EPA 418 1	19-Oct-04	19-Oct-04	WJ42001	1	mg/kg	10	31	TRPH
Î	DHS LUFT	19-Oct-04	**	**	+1	"	10	ND	Gasoline (C5-C11)
	h	lf	ės .	*1	71	u	10	ND	Diesel (C12-C24)
						19-Oct-04	Received:	Sampled: 19-Oct-04	41319-EX 7B (W410007-08) Soil
	EPA 418 1	19-Oct-04	19-Oct-04	WJ42001	1	mg/kg	10	ND	TRPH
í	DHS LUFT	19-Oct-04	II.	**	u	и	10	ND	Gasoline (C5-C11)
	ŧŧ	lt	íi .	**	a	и	10	ND	Diesel (C12-C24)
					04	d: 19-Oct-	04 Receive	oil Sampled: 19-Oct-(41319-EX 18-1.5 (W410007-09) So
	EPA 418 1	19-Oct-04	19-Oct-04	WJ42001	1	mg/kg	10	340	TRPH
	DHS LUFT	19-Oct-04	II .	· ·	If	n	10	ND	Gasoline (C5-C11)
	u	ŧı	ч	u	u	n .	10	ND	P─¬I (C12-C24)
						19-Oct-04	Received:	Sampled: 19-Oct-04	EX 18S (W410007-10) Soil
	EPA 418 1	19-Oct-04	19-Oct-04	WJ42001	10	mg/kg	100	1200	TRPH
î	DHS LUFT	19-Oct-04	*1	11	ì	li .	10	ND	Gasoline (C5-C11)
	10	11	11	a	"	"	10	ND	Diesel (C12-C24)
						19-Oct-04	Received:	Sampled: 19-Oct-04	41319-EX 18B (W410007-11) Soil
	EPA 418 1	19-Oct-04	19-Oct-04	WJ42001	10	mg/kg	100	1600	TRPH
i	DHS LUFT	19-Oct-04	41	a	1	"	10	ND	Gasoline (C5-C11)
	P	Ħ	**	ч	n	n	10	ND	Diesel (C12-C24)
					1	19-Oct-04	Received:	Sampled: 19-Oct-04	41319-EX 20B (W410007-12) Soil
	EPA 418 1	19-Oct-04	19-Oct-04	WJ42001	10	mg/kg	100	2200	TRPH
	DHS LUFT	19-Oct-04	1)	и	1	п	10	ND	Gasoline (C5-C11)
D-02	II.	Ħ	11	ч	U	n	10	110	Diesel (C12-C24)
					1	n			•



Project: NP101904-W1

2730 McKean Str , Suite 1 San Diego CA, 92136-5294 Project Number: 11361702008; Tank 41319

Reported:

Project Manager: Mr Craig Haverstick

26-Oct-04

Soil Analyses

H&P Mobile Geochemistry Lab W1

Analyte 41319-EX 20S (W410007-13) Soil	Result Sampled: 19-Oct-04	Reporting Limit Received:	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
TRPH Gasoline (C5-C11)	12 ND	10 10	mg/kg "	1	WJ42001	19-Oct-04	19-Oct-04 19-Oct-04	EPA 418 I DHS LUFT	
Diesel (C12-C24)	ND	10	11	п	14	н	It	п	



2730 McKean Str., Suite I San Diego CA., 92136-5294 Project: NP101904-W1

Project Number: 11361702008; Tank 41319 Project Manager: Mr Craig Haverstick Reported: 26-Oct-04

Soil Analyses - Quality Control H&P Mobile Geochemistry Lab W1

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch WJ42001 - Freon Extraction										
Blank (WJ42001-BLK1)				Prepared	& Analyze	ed: 19-Oc	t-04			
Gasoline (C5-C11)	ND	10	mg/kg							
Diesel (C12-C24)	ND	10	11							
Blank (WJ42001-BLK2)				Prepared	& Analyze	ed: 19-Oc	t-04			
TRPH	ND	10	mg/kg							
LCS (WJ42001-BS1)				Prepared	& Analyze	ed: 19-Oc	t-04			
Gasoline (C5-C11)	240	10	mg/kg	200		120	67-125			
Diesel (C12-C24)	540	10	II	500		108	67-125			
. (WJ42001-BS2)				Prepared	& Analyze	ed: 19-Oc	1- 04			
TRPH	487	10	mg/kg	500		97 4	75-125			
LCS Dup (WJ42001-BSD1)				Prepared	& Analyzo	ed: 19-Oc	t-04			
Gasoline (C5-C11)	200	10	mg/kg	200		100	67-125	182	30	
Diesel (C12-C24)	480	10	11	500		96 0	67-125	118	30	
LCS Dup (WJ42001-BSD2)				Prepared	& Analyzo	ed: 19-Oc	t-04			
TRPH	494	10	mg/kg	500		98 8	75-125	1 43	30	W
Matrix Spike (WJ42001-MS1)	So	arce: W4100	07-03	Prepared -	& Analyze	ed: 19-Oc	t-04			
Gasoline (C5-C11)	210	10	mg/kg	200	ND	105	67-125			
Diesel (C12-C24)	460	10	**	500	ND	92 0	67-125			
Matrix Spike (WJ42001-MS2)	So	urce: W4100	07-03	Prepared a	& Analyze	ed: 19-Oc	t-04			
TRPH	485	10	mg/kg	500	ND	97 0	75-125			
Matrix Spike Dup (WJ42001-MSD1)	So	urce: W4100	07-03	Prepared -	& Analyzo	ed: 19-Oct	1-04			
Gasoline (C5-C11)	190	10	mg/kg	200	ND	95 0	67-125	100	30	
Diesel (C12-C24)	470	10	#	500	ND	94 0	67-125	2 15	30	



Project: NP101904-W1

2730 McKean Str , Suite I San Diego CA , 92136-5294 Project Number: 11361702008; Tank 41319 Project Manager: Mr Craig Haverstick Reported: 26-Oct-04

Soil Analyses - Quality Control H&P Mobile Geochemistry Lab W1

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch WJ42001 - Freon Extraction										
Matrix Spike Dup (WJ42001-MSD2)	Source	e: W4100	07-03	Prepared a			t-04			
TRPH	503	10	mg/kg	500	ND	101	75-125	3 64	30	



Navy PWC Project: NP101904-W1

2730 McKean Str , Suite IProject Number: 11361702008; Tank 41319Reported:San Diego CA , 92136-5294Project Manager: Mr. Craig Haverstick26-Oct-04

Notes and Definitions

D-02 Hydrocarbon pattern present in the requested fuel quantitation range but does not resemble the pattern of the requested fuel

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

	LABS			
,		X		
	2373 208th Street Unit F-1, Torrance, CA 90501 • ph 310.782.2929 • fax 310.782.279	432 N. Cedros Ave., Solana Beach, CA 92075 • ph 858.793.0401 • fax 858.793.0404	148 S. Vinewood St., Escondido, CA 92029 • ph 760.735.3208 • fax 760.735.2469	Chain of Custody Rec

148 S. Vinewood St., Escondido, CA 92029 • ph 760.735.3208 • fax 760.735.2469 Chain of Custody Record

HPL Project # 100 / 019 D4 W/ Outside Lab: _

LABS 2373 208th Street Unit F-1, Torrance, CA 90501 • ph 310.782.2929 • fax 310.782.2798	, Torrance, CA 9050	1 • ph 310.782.292	9 • fax 310.782.2798	Q	Outside Lab:	***************************************
client: Navy Public W	ork?		Collector Q. Have		Page: /	Of .
Address: 2730 Mckean St	+ #/		Client Project # 1361	72008 Pr	Project Manager	Haverstick
San Diego		36	Location: FONK #		Ø.	leton Areay
Phone: 614-511-4250 Fax:	614-5-4-	6000	Turn around time:			
Notes:		nds	8260B		Sam	Sample Receipt
	٠	moou			ntec	Intact: ☐ Yes ☐ No
		rBE	es .		S e e	Seal Intact: ☐ Yes ☐ No ☐ N/A
		d X/M	enate		Cold	Cold: ☐ Yes ☐ No
J		ktende or BTE	CRPH Oxyg	Gases	- NA	N/A (Received on Site) ਹੈਂ ਨ
Sample Depth Time Date	Sample Container Type Type	TPH g: TPH e: 8021 fc	A18 1 BTEX Oxyge VOC s VOC s	Fixed (Fie	Field Notes
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9-41319-EX18-115 1300						**************************************
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1741319-EXI8B 1300		·				
1241319-EX208 1315						
13-41/319 - Ex 208 315						
14 41319 W	₩) ©				
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	(company)	Received by: (Signature)	ure)	(company)	ny) Date:	Time:
Relinquished by: (Signal** `	(company)	Received by: (Signation	*****	(company)	ny) Date:	Time: 44
*Signature constitutes auation to proceed with analysis and acceptance of condition on back.	nce of condition on back.	Sample disposal in.	л: Disposal @ \$2.00 each	10 each Return to client	client Pickup	}



ov-2004

Mr. Len Sinfield Navy PWC 2730 McKean Str., Suite 1 San Diego, CA. 92136-5294

RE: NP110104-L3

Enclosed are the results of analyses for samples received by the laboratory on 01-Nov-04. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Rebecco Lfohuse for ra Davis

Lawuratory Director

H&P Mobile Geochemistry operates under CA Environmental Lab Accreditation Program Numbers 1317, 1561, 1667, 1745, 1746, 1839, 2088, 2278, 2530 and 2543.





2730 McKean Str , Suite I San Diego CA., 92136-5294

Project: NP110104-L3
Project Number: 11361702008/Tank 41319 Project Manager: Mr Len Sinfield

Reported: 08-Nov-04

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
41319-EX01	3411001-01	Soil	01-Nov-04	01-Nov-04
41319-EX03	3411001-02	Soil	01-Nov-04	01-Nov-04
41319-EX05	3411001-03	Soil	01-Nov-04	01-Nov-04
41319-EX06	3411001-04	Soil	01-Nov-04	01-Nov-04
41319-EX09	3411001-05	Soil	01-Nov-04	01-Nov-04
41319-EX11	3411001-06	Soil	01-Nov-04	01-Nov-04
41319-EX12	3411001-07	Soil	01-Nov-04	01-Nov-04
41319-EX13	3411001-08	Soil	01-Nov-04	01-Nov-04
9-EX14	3411001-09	Soil	01-Nov-04	01-Nov-04
. 19-EX15	3411001-10	Soil	01-Nov-04	01-Nov-04
41319-EX16	3411001-11	Soil	01-Nov-04	01-Nov-04
41319-EX17	3411001-12	Soil	01-Nov-04	01-Nov-04
41319-EX21	3411001-13	Soil	01-Nov-04	01-Nov-04
41319-EX23	3411001-14	Soil	01-Nov-04	01-Nov-04
41319-EX19	3411001-15	Soil	01-Nov-04	01-Nov-04
41319-EX22	3411001-16	Soil	01-Nov-04	01-Nov-04



2730 McKean Str , Suite 1 San Diego CA , 92136-5294 Project: NP110104-L3

Project Number: 11361702008/Tank 41319 Project Manager: Mr Len Sinfield Reported: 08-Nov-04

TPH by GC FID

H&P Mobile Geochemistry Lab L3

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
41319-EX01 (3411001-01) Soil	Sampled: 01-Nov-04	Received: 01	-Nov-04						
Diesel (C12-C24)	ND	10	mg/kg	1	3K40101	01-Nov-04	03-Nov-04	DHS LUFT/8015M	
Motor Oil (C25-C36) Gasoline (C5-C11)	ND ND	10 10	"	11		01-Nov-04 01-Nov-04	**	n P	
41319-EX03 (3411001-02) Soil	Sampled: 01-Nov-04	Received: 01	-Nov-04						
Diesel (C12-C24)	16	10	mg/kg	1	3K40101	01-Nov-04	03-Nov-04	DHS LUFT/8015M	D-06
Motor Oil (C25-C36)	250	10	\$ 1	7.0	**	01-Nov-04	It	11	
ne (C5-C11)	ND	10	##	†ŧ	**	01-Nov-04	It	₹	
4. J-EX05 (3411001-03) Soil	Sampled: 01-Nov-04	Received: 01	-Nov-04						
Diesel (C12-C24)	ND	10	mg/kg	1	3K40101	01-Nov-04	03-Nov-04	DHS LUFT/8015M	
Motor Oil (C25-C36)	ND	10	"	**	u	01-Nov-04	11	и	
Gasoline (C5-C11)	ND	10	**	*	**	01-Nov-04	1(П	
41319-EX06 (3411001-04) Soil	Sampled: 01-Nov-04	Received: 01	-Nov-04						
Diesel (C12-C24)	ND	10	mg/kg	1	3K40101	01-Nov-04	03-Nov-04	DHS LUFT/8015M	
Motor Oil (C25-C36)	ND	10	#	18	u	01-Nov-04	t.	U	
Gasoline (C5-C11)	ND	10	19	(*	"	01-Nov-04	+)	11	
41319-EX09 (3411001-05) Soil	Sampled: 01-Nov-04	Received: 01	-Nov-04						
Diesel (C12-C24)	54	10	mg/kg	1	3K40101	01-Nov-04	03-Nov-04	DHS LUFT/8015M	D-06
Motor Oil (C25-C36)	380	10	r	+1		01-Nov-04	11	u	
Gasoline (C5-C11)	ND	10	"		**	01-Nov-04	**	P.	
41319-EX11 (3411001-06) Soil	Sampled: 01-Nov-04	Received: 01	-Nov-04						
Diesel (C12-C24)	210	10	mg/kg	****	3K40101	01-Nov-04	03-Nov-04	DHS LUFT/8015M	D-06
Motor Oil (C25-C36)	4900	10	"	"	"	01-Nov-04	u	"	
Gasoline (C5-C11)	ND	10	и	IF	Д	01-Nov-04	н	(1	



2730 McKean Str., Suite I San Diego CA., 92136-5294 Project: NPI10104-L3

Project Number: 11361702008/Tank 41319
Project Manager: Mr Len Sinfield

Reported: 08-Nov-04

TPH by GC FID

H&P Mobile Geochemistry Lab L3

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
41319-EX12 (3411001-07) Soil	Sampled: 01-Nov-04	Received: 01-	Nov-04						
Diesel (C12-C24)	ND	10	mg/kg	1	3K40101	01-Nov-04	03-Nov-04	DHS LUFT/8015M	
Motor Oil (C25-C36)	ND	10	"	n	n .	01-Nov-04	II	LOF I/6013M	
Gasoline (C5-C11)	ND	10	11	**	*1	01-Nov-04	и	*1	
41319-EX13 (3411001-08) Soil	Sampled: 01-Nov-04	Received: 01-	Nov-04						
Diesel (C12-C24)	ND	10	mg/kg	1	3K40101	01-Nov-04	03-Nov-04	DHS LUFT/8015M	
Motor Oil (C25-C36)	ND	10	**	ш	u	01-Nov-04	u	9	
ne (C5-C11)	ND	10	lf	n	II.	01-Nov-04	н	÷1	
4	Sampled: 01-Nov-04	Received: 01-	Nov-04						
Diesel (C12-C24)	ND	10	mg/kg	l	3K40101	01-Nov-04	03-Nov-04	DHS LUFT/8015M	
Motor Oil (C25-C36)	ND	10	n	**	**	01-Nov-04	**	"	
Gasoline (C5-C11)	ND	10	п	9.5	#f	01-Nov-04	7		
41319-EX15 (3411001-10) Soil	Sampled: 01-Nov-04	Received: 01-	Nov-04						
Diesel (C12-C24)	ND	10	mg/kg	1	3K40101	01-Nov-04	03-Nov-04	DHS LUFT/8015M	
Motor Oil (C25-C36)	ND	10	*1	**	rr	01-Nov-04	и	11	
Gasoline (C5-C11)	ND	10	†1	u	11	01-Nov-04	u	11	
41319-EX16 (3411001-11) Soil	Sampled: 01-Nov-04	Received: 01-	Nov-04						
Diesel (C12-C24)	ND	10	mg/kg]	3K40101	01-Nov-04	03-Nov-04	DHS LUFT/8015M	
Motor Oil (C25-C36)	ND	10	**	п	o o	01-Nov-04	"	15	
Gasoline (C5-C11)	ND	10	**	n	ш	01-Nov-04	**	11	
41319-EX17 (3411001-12) Soil	Sampled: 01-Nov-04	Received: 01-	Nov-04						
Diesel (C12-C24)	ND	10	mg/kg	J	3K40101	01-Nov-04	03-Nov-04	DHS LUFT/8015M	
Motor Oil (C25-C36)	ND	10	**	u	"	01-Nov-04	+5	**	
Gasoline (C5-C11)	ND	10	*1	и	и	01-Nov-04	**	14	



2730 McKean Str., Suite 1 San Diego CA., 92136-5294 Project: NPI10104-L3

Project Number: 11361702008/Tank 41319 Project Manager: Mr Len Sinfield Reported: 08-Nov-04

TPH by GC FID

H&P Mobile Geochemistry Lab L3

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
41319-EX21 (3411001-13) Soil	Sampled: 01-Nov-04	Received: 01	-Nov-04						
Diesel (C12-C24)	ND	10	mg/kg	1	3K40101	01-Nov-04	03-Nov-04	DHS LUFT/8015M	
Motor Oil (C25-C36)	ND	10	**	u	**	44	11	11	
Gasoline (C5-C11)	ND	10	t*	ч	**	\$\$	11	વ	
41319-EX23 (3411001-14) Soil	Sampled: 01-Nov-04	Received: 01	-Nov-04						
Diesel (C12-C24)	ND	10	mg/kg	1	3K40101	01-Nov-04	03-Nov-04	DHS LUFT/8015M	
Motor Oil (C25-C36)	ND	10	11	u	11	¥ŧ	11	+1	
ve (C5-C11)	ND	10	31	ur	19	#	÷1	ŧI	
4EX19 (3411001-15) Soil	Sampled: 01-Nov-04	Received: 01	-Nov-04						
Diesel (C12-C24)	ND	10	mg/kg	1	3K40101	01-Nov-04	03-Nov-04	DHS LUFT/8015M	
Motor Oil (C25-C36)	ND	10	#1	If	1)	**	11	+)	
Gasoline (C5-C11)	ND	10	п	**	n	**	н	1)	
41319-EX22 (3411001-16) Soil	Sampled: 01-Nov-04	Received: 01	-Nov-04						
Diesel (C12-C24)	ND	10	mg/kg	1	3K40101	01-Nov-04	03-Nov-04	DHS LUFT/8015M	
Motor Oil (C25-C36)	ND	10	**	41	11	11	19	и	
Gasoline (C5-C11)	ND	10	**	п	**	n	11	te	



2730 McKean Str., Suite 1 San Diego CA., 92136-5294 Project: NP110104-L3

Project Number: 11361702008/Tank 41319 Project Manager: Mr Len Sinfield Reported: 08-Nov-04

TPH by GC FID - Quality Control H&P Mobile Geochemistry Lab L3

		Reporting	11-14-	Spike	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Analyte	Result	Limit	Units	Level	Resuit	70KEC	Linns	KT D	Finn	110103
Batch 3K40101 - LUFT-DHS										
Blank (3K40101-BLK1)				Prepared:	01-Nov-0	4 Analyze	d: 03-Nov	-04		
Diesel (C12-C24)	ND	10	mg/kg							
Gasoline (C5-C11)	ND	10	ŧf							
Motor Oil (C25-C36)	ND	10	75							
LCS (3K40101-BS1)		(mand-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1		Prepared:	01-Nov-0	4 Analyze	d: 03-Nov	-04		and the second s
Diesel (C12-C24)	237	10	mg/kg	251		94 4	67-125			
ле (C5-C11)	133	10	**	151		88 1	67-125			
LCS Dup (3K40101-BSD1)				Prepared:	01-Nov-0	4 Analyze	d: 03-Nov	-04		
Diesel (C12-C24)	262	10	mg/kg	251		104	67-125	100	30	
Gasoline (C5-C11)	153	10	+1	151		101	67-125	140	30	
Matrix Spike (3K40101-MS1)	So	irce: 341100	1-01	Prepared:	01-Nov-0	4 Analyze	d: 03-Nov	-04	and the second second section of the first	
Diesel (C12-C24)	231	10	mg/kg	251	ND	92 0	67-125			
Gasoline (C5-C11)	126	10	q	151	ND	83 4	67-125			
, ,										
Matrix Spike Dup (3K40101-MSD1)	So	ırce: 341100	1-01	Prepared:	01-Nov-0	4 Analyze	d: 03-Nov	-04		en en en en en en en en en en en en en e
Diesel (C12-C24)	225	10	mg/kg	251	ND	89 6	67-125	2 63	30	
Gasoline (C5-C11)	161	10	89	151	ND	107	67-125	24 4	30	



Project: NP110104-L3

Project Number: 11361702008/Tank 41319

Reported:

2730 McKean Str., Suite 1 San Diego CA., 92136-5294

Project Manager: Mr. Len Sinfield

08-Nov-04

Notes and Definitions

D-06 The sample chromatographic pattern does not resemble the fuel standard used for quantitation

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

MOBILE ---OCHEMISTRY 148 S. V

Chain of Cr tody Record

148 S. Vinewood St., Escondido, CA 92029 • ph 760.7 ... J8 • fax 760.735.2469 ... 432 N. Cedros Ave., Solana Beach, CA 92075 • ph 858.793.0401 • fax 858.793.0404

2373 208th Street Unit F-1, Torrance, CA 90501 • ph 310.782.2929 • fax 310.782.2798

fotal # of containers B Ime: Pickup Date: Client Project # ガラルチャラベンタ pn y 4134 bject Manager Fixed Gases Methane Return to client (company). (company) VOC's and Oxygenates 8260B сејецебкухО BTEX / Oxygenates collector: (YOUR HAWKSATZ Location: ("any Rodle fix Disposal @ \$2.00 each H9AT 1.811 8021 for Halogenated compounds 8021 for BTEX/MTBE TPH extended Turn around time: leseib \ eniloseg H9T Seal Intact: ☐ Yes ☐ No ☐ N/A Container Type 402 Sample disposal instruction; N/A (Received on Site) Received by: (Signature) ived by: (Signature Infact: XYes 🗆 No Sample Receipt Cold: ☐ Yes ☐ No Sample Type 28. Date 0 EDF Yes / No Signature constitutes authorization to proceed with analysis and acceptance of condition on back. Pyc SO (company) (company) C#30 C845 るが 350 (company) Time 852 60 88 200 (2C) 8 000 615 1015 Depth Fax: HE 123 | Cincle (Apriles Acid Field Point Name Global ID: TOBOT 301667 Nove Pucc 2017 -EXC5 -Ex03 ished by: (Signature) Relinquished by: (Signature) -Ex09 543 CX 14 民历 ار ار ا 戸なり -6112 510 Sample Name -------41319-Exel Address: Phone: 100114,6 Ç $\overset{\circ}{\beta}$ な な Ş حي <u>ပ</u> 5 j さ

2373 208th Street Unit F-1, Torrance, CA 90501 • ph 310.782.2929 • fax 310.782.2798 ~ CHEMISTRY

Chain of Cr -tody Record

432 N. Cedros Ave., Solana Beach, CA 92075 • ph 858.793.0401 • fax 858.793.0404 J8 • fax 760.735.2469 148 S. Vinewood St., Escondido, CA 92029 • ph 760.7"

H&P Project # 110116. Outside Lab: Date:

Olient: Neva+W)	j					collector: Cladig	ड्ड	15 J		:		Page:			W 20 W.		***************************************
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Sample Name	Field Point Name	Depth	Тіте	Date	Sample Type	Container Type	sg H9T ≪9 H9T	8021 K	0) 1208 	BTEX /	ΛΟC.¢ Οxλĝeι	NOC.2	nerheM Pixed O				# l6l0T
41319-Ex19			12.45	1/11	7.58	402			<u> </u>		ļ	<u> </u>	ļ				
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Navy Regional Environmental Laboratory

Thursday, November 18, 2004

Public Works Center C-910 Naval Air Station North Island Bldg M-9 San Diego, CA 92135 Tel: (619) 545-8431 Fax: (619) 545-0793 NELAP CERT NO: 01124CA

Client: Karen Collins ATTN: Craig Haverstick

Sample Data Package

Lab Batch Number:

42318 & 42397

Samples Received On: 10/

10/20 & 11/2/2004

Client Project Name/Number: UST 41319 / Project 199-0104

This sample data package includes the test results, associated QA/QC documents, Chain of Custody forms, and other relevant documentation for your samples. This page of the report is an integral part of this data package. All results are reported on a wet weight basis unless otherwise noted.

All analysis reported in this sample data package were analyzed by the subcontract laboratory Calscience Environmental Lab, CA ELAP number 1230.

We appreciate the opportunity to provide quality environmental testing services and look forward to meeting your needs in the future.

I certify that the test results meet all requirements of the National Environmental Laboratory Accreditation Conference (NELAC) and/or the above accrediting agencies

Joe Arlauskas, Laboratory Director Allen Hollander, Project Manager



Navy Public Works Center Environmental Chemistry Laboratory, Code 910 Naval Air Station North Island Bldg M-9

San Diego, CA 92135 Tel: (619) 545-8431 Fax: (619) 545-0793

		Date of Report:	11/18/04
Lab Number	Sample Summar Sample ID	V Date Sample Collected	
42318-01	B4S-1	10/18/2004	
42397-01	NAV-EX21	11/1/2004	

	RALUFT(RCRA) E. Inwa Surcharge PROJ. # [0](4) PROJ. # [0](4)	U OINER	ə d	msS/s	· · · ontainer) fo tedr	nuM	50	V F	100			C)Z (%)		TIME:		
- 12/milbox +	CHECK REGULATORY PROGRAM CHECK REGULATORY PROGRAM CHAZWASTE/GROUNDWATER/LUFT (RCRA) CHORINKING WATER (SDV/A) CHORINKING WATER (SDV/A) CHORINKING WATER (NPDES/CWA) CHORING (NPDES/CWA)	PRESERVATION CODE/BOTILE CODE	ANALYSIS REQUESTED				-						DATE: 10-20-04	DATE:	DATE:	COOLER TEMP degrees C	
DISTORY CHAIN-UF-CUSTODY 13-04 TAY TO INCLUSION	CUSTOMER DUE DATE: D 4 Frog. 13 623-50 2008 SAMPLED BY (PRINT): Craff, 1/4000 SAMPLED BY (PRINT): Craff, 1/40000 SAMPLED BY (PRINT): Craff, 1/400000 SAMPLED BY (PRINT): Craff, 1/400000 SAMPLED BY (PRINT): Craff, 1/4000000000000000000000000000000000000	0015			W5108	, PH3 , H32	7 /	2016 X X X	x x x 7:05			. (HANGE SILL STORM	RECEIVED BY: (PRINT & SIGN) RECEIVED BY:		1239- San-Cool New L	5 = Zinc Acetate(ZnC2H3O2) proacetic acid(C2H3O2CI) NA = N
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	DFICKED UND WARD MAN DE	PHONE: (1,1		PHONE: FAX: 4-6OCC		DATE	10/13/04 (260		MSD) (0/(8/04 1200				O N. Crais Houses			Could Havenshick (see Ms	=Sulluric Acid(H2SO4) 4 = Sodium Hydroxide (C6H8O6) 8.= Sodium Bisulfate(NaHSO4) 9=
	Navy Keglonal '-'ronmental Laboratory Public onler Code 810 Naval Air S. rth Island, BLDG-M9 San c.e.go, CA 92135. Phone: (619)545-8431 · Fax: (619)545-0793.	CONTACT: CINIG 1/ AURAS + 1C/C	ALT. CONTACT: K. D. 1. P. O. 1.08 (1.25	Cape 980	AUNESS: 2150 Mc(LA)	E-MAIL: CAB: SAMPLE IDENTIFICATION*	4230-01 B45-1	<u>J</u> ,) 1-51-51 a				KELINQUISHED BY: (White BY) (ELINQUISHED BY:	4. PRINT & SIGN) ELINQUISHED BY:		Note-New 10th form	= Mitric Acid(HNO3) 2 = Hydrochlone Acid(HCl) 3 =Sulfuric Acid(H2SO4) 4 = Sodium Hydroxide(NaOH) = Sodium Thiosulfate(Na2S2O3) 7 = Ascorbic Acid(C6H8O6) 8 = Sodium Bisulfate(NaHSO4) 9 = Monochl

SAMPLE CONDITION UPON RECEIPT (SCUR) FORM

ACTIVITY: PUC Colog (CO) PWC.8DG#: 47318			
SAMPLES RECEIVED IN: COOLER(S) BOX(ES): OTHER			^~~
DELIVERED BY: C. HAVECSTICK			
NUMBER OF COOLERS/BOXES/OTHER: LOG-IN DATE/TIME: L	<u> </u>	04 (<u>(127)</u>
LOGGED IN BY: Alker Colland SIGNATURE: (III)	e Ubi	il.	
SECTION A: Are there any discrepancies? (If yes, please complete the entire form. If		Yes	No)
no, the Sample Custodian (SC) or designee ensures that the remainder of the questions		(
are answered in the affirmative or are non-applicable.) SECTION B: Questions 1-9	_		
1 Are custody seals on shipping containers intact?	NA	Yes	No
		103	110
2 Were Chain of Custody (COC) forms filled out completely and properly by the customer?		Yes	No
3 Were all sample containers received intact (not broken or leaking, etc.)?		Yes	No
4. Were correct containers used for the analysis requested?		Yes	No
5. Were appropriate samples correctly preserved?	NA	Yes	No
6 Were sufficient sample amounts sent for each analysis requested?		Yes	No
7. Were air bubbles absent from VOA sample(s)?	NA	Yes	No
'. Are all samples within holding times for the requested analyses?		Yes	No
9. Were samples sufficiently chilled?	NA	Yes	No
If included, report temperature of temperature blank°C		***	
Cooler temperature(s) #1 #2 #3 #4 #5		,	
A NO RESPONSE TO ANY QUESTION REQUIRES AN EXPLAN. Describe discrepancy (include question#):		***	•
	····		
Was the client contacted?YesNo			
Was the pH of any sample adjusted by the laboratory?YesNo If yes, plo	ease no	ote the	following
nte Time SCTest/Preservative			
vateTimeSCTest/Preservative			

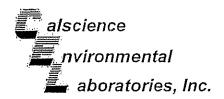
AFTER pH ADJUSTMENT OF DRINKING WATER METALS, HOLD METALS SAMPLES FOR ≥16 HRS AND THEN VERIFIED & DOCUMENTED BY THE ANALYST TO BE pH <2 BEFORE ANALYSIS.

, j a -000	ISE ONLY)	РРОЈ. #. <u>[¶О.]</u> © NAVMIR	© • OTHER	ə du	TIS(Set	ənistno	- O 10 ·	ıəquır) Ni	21		2				TIME: Of CO	TIME: 0900	TIME:		Olhers.	
JSTODY ALE A. W.	\mathbf{I}	113623 502002 Crails HAMESKILL	PRESERVATION CODE/BOTTLE CODE	ANALYSIS REQUESTED	w	510 % 510 %	0	10L 10L		X X	×					MISSALO M. CHAND DATE: BILLYGY	LL CHENTRAL DATE: 11/2/04	DATE	· degrees C · Y © R: Y ©	SEAL INTAGT: Y 四	Ž II
LABORATORY CHAIN-OF-CUSTODY	CUST	GUARD MÁIL JOB ORDER #:	PHONE (2/G. C.1.		PHONE. 4-6000			COLLECTED COLLECTED MATRIX	11/1/04 1250 Soll	15 11/104 1250 Soil	M50 11/104 1250 Soil				rth i re-	TIG THE PRINT A SIGN (PRINT A SIGN)	PRECEIVED BY: U. A. PRECEIVED BY: U. B. PRECEI		(השל ממוות) (השל ממוות)	2 = Hydrochloric Acid(HCl) 3 = Sulfuric Acid(H2SO4) 4 = Sodium Hydroxide(NaOH) 5 = Zinc & Acid(H2SO4)	7 = Ascorbic Acid(C6HBO6) 8.≈ Sodium Blsulfate(NaHSO4) 9= Monochloroaceti
	Navy Regi uvironmental Laboratory Pt ks Center Code 810 Naval At. on North Island, BLDG-M9 San Dieno, CA 92435	Phone: (619)545-8431 Fax: (619)545-0793	CONTACT: (1 01 (-) (-) (-) (-) (-)		ACTIVITY: Pue Cool 980	ADDRESS: 2730 MC/Leyn S	E-MAIL:	LAB SAMPLE IDENTIFICATION (LOG MUMBER)	4239-61 NAV-EX21	NAV-EX21 MS	UNAN-EXZIM	CT			RELINQUISHED BY: CIAIG NAMES L	(7C8 62/4 R		COMMENTS: *= Location of where the samples(s) were relieved		1 = Nitric Acid(HNO3) 2 = Hydrochloric Acid(HCl) 3 = S	o = Sodium i hiosulfate(Ma2S2O3) 7 = Ascorbic Acid(C6

SAMPLE CONDITION UPON RECEIPT (SCUR) FORM

ACTIVITY: (980) PWCSDG#: 47397			
SAMPLES RECEIVED IN: COOLER(S) ROX(ES): OTHER	•		-
DELIVERED BY: A CKUZ	·		
NUMBER OF COOLERS/BOXES/OTHER: LOG-IN DATE/TIME: 4	2/0/1	1910	0
LOGGED IN BY: A. Hallower SIGNATURE OUT	SOL	mi 1	
SECTION A: Are there any discrepancies? (If yes, please complete the entire form. If		Yes	Tito J
no, the Sample Custodian (SC) or designee ensures that the remainder of the questions		162	170
are answered in the affirmative or are non-applicable.) SECTION B: Questions 1-9			
1 Are custody seals on shipping containers intact?	NA NA	Yes	No
		100	
2. Were Chain of Custody (COC) forms filled out completely and properly by the customer?		Yes	No
3 Were all sample containers received intact (not broken or leaking, etc.)?		Yes	No
4. Were correct containers used for the analysis requested?		Yes	No
5. Were appropriate samples correctly preserved?	NA	Yes	No
6 Were sufficient sample amounts sent for each analysis requested?		Yes	No
7. Were air bubbles absent from VOA sample(s)?	NA	Yes	No
Are all samples within holding times for the requested analyses?	***************************************	Yes	No
9. Were samples sufficiently chilled?	NA	Yes	No
If included, report temperature of temperature blank°C Cooler temperature(s) #1 #2 #3 #4 #5		2 00	
A NO RESPONSE TO ANY QUESTION REQUIRES AN EXPLANA	TION	BELO.	W
Describe discrepancy (include question#):			
	~		
Vas the client contacted?YesNo			
	ase no	te the	following:
Vas the client contacted? Yes No Vas the pH of any sample adjusted by the laboratory? Yes No If yes, ple SC Test/Preservative			
as the client contacted?YesNo			

AFTER pH ADJUSTMENT OF DRINKING WATER METALS, HOLD METALS SAMPLES FOR ≥ 16 HRS AND THEN VERIFIED & DOCUMENTED BY THE ANALYSIS.





November 04, 2004

Lyn Vasquez Navy Public Works Center 2730 McKean Street, Suite 1 San Diego, CA 92136-5294

Subject:

Calscience Work Order No.:

Client Reference:

04-10-1309

CEL-0994&CEL-0997 / Lab #42318 / Proj

#199-01

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 10/21/2004 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Assurance Program Manual, applicable standard operating procedures, and other related documentation. The original report of any subcontracted analysis is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Calscience Environmental Laboratories, Inc.

Virendra Patel Project Manager





Case Narrative for 04-10-1309

Sample Condition on Receipt

One soil sample was received as part of this Work Order on October 21, 2004. All samples were transferred to the laboratory in an ice-chest following strict chain-of-custody procedures. The temperature (4.1°C) of the sample was measured upon arrival in the laboratory and was within acceptable limits. The sample was logged into the Laboratory Information Management System (LIMS), given laboratory identification numbers, and stored in refrigeration units pending analysis.

The original report of any subcontracted analysis is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in it entirety.

Data Summary

The samples included in this report were analyzed in accordance with the attached chain-of custody. Data is presented on a dry weight basis.

Holding Times

All holding time requirements were met with the exception of DHS LUFT Gasoline, EPA 5035 analysis. The sample was received outside the recommended holding time for this method. Therefore, the data have been flagged accordingly and released without further action or clarification.

Calibration

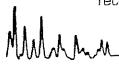
Frequency and control criteria for initial and continuing calibration verifications were met.

Blanks

The method blank data showed non-detectable levels for all constituents.

Matrix Spikes

Matrix Spikes (MS) and Matrix Spike Duplicates (MSD) were performed at required frequencies. All recoveries were within acceptable limits with the exception of DHS LUFT Gasoline in batch 041025S01. The affected recoveries have been flagged with a "3" qualifier. As a direct result of the unacceptable recoveries for the MS and/or MSD, the relative percent difference was also







Case Narrative for 04-10-1309

outside acceptable limits. These recoveries have been flagged with a "4" qualifier.

Note that the corresponding Laboratory Control Sample (LCS) and Laboratory Control Sample Duplicate (LCSD) recoveries were within control limits, indicating a matrix interference effect. Therefore, the data is released without further action or gualification.

Laboratory Control Samples

The Laboratory Control Sample (LCS) analyses were performed at the required frequencies. All recoveries were within acceptable limits.



Analytical Report



Navy Public Works Center 2730 McKean Street, Suite 1 San Diego, CA 92136-5294 Date Received: Work Order No: Preparation: Method: 10/21/04 04-10-1309 N/A ASTM D-2216

Project: CEL-0994&CEL-0997 / Lab #42318 / Proj #199-01

Page 1 of 1

Client Sample Number		Lab Sa Numi		Date Collected	Matrix	Date Prepared	Date Analyzed	QC Balch ID
42318-01 B4S-1	and the Contract Salles sall	04-10	1309-1	10/18/04	Solid	N/A :	10/26/04	41026MOID1
<u>Parameler</u>	Result	RL	MDL	<u>DF</u>	Qual	<u>Units</u>		
Moisture	10 6	0 1	0.100	1		%		



ANALYTICAL REPORT



Navy Public Works Center 2730 McKean Street, Suite 1 San Diego, CA 92136-5294 Date Received: Work Order No.: Preparation: Method: 10/21/04 04-10-1309 EPA 3550B DHS LUFT

Project: CEL-0994&CEL-0997 / Lab #42318 / Proj #199-01

Page 1 of 1

Client Sample Number		Lab Sample Number	Date Collected		Matrix	Date Prepared	Dale Analyzed	QC Batch ID
42318-01 B4S-1		04-10-1309-1	10/18/04		Solid	10/22/04	10/22/04	041022B04
Comment(s): Parameter	-Results are repo	orted on a dry weigl <u>Result</u>	nt basis <u>RL</u>	MDL	<u>DF</u>	Qual	<u>Units</u>	
TPH as Diesel		130	11.2	5 4	1 12		mg/kg	
Surrogates:		REC (%)	Control Limits			<u>Qual</u>		
Decachlorobiphenyl		89	62-152					
Method Blank		098:03:002-3,816	N/A		Solid :	10/22/04	10/22/04	041022B04
<u>Parameter</u>	•	Result	RL	MDL	DF	Qual	Units	
าH as Diesel		ND	10	4 8	1		mg/kg	
Surrogates:		REC (%)	<u>Control</u> <u>Limits</u>			Qual		
Decachiorobiphenyl		76	62-152					



ANALYTICAL REPORT



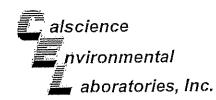
Navy Public Works Center 2730 McKean Street, Suite 1 San Diego, CA 92136-5294

Date Received: Work Order No.: Preparation: Method:

10/21/04 04-10-1309 EPA 5035 DHS LUFT

Page 1 of 1

Project: CEL-09	994&CEL-0997 /	Lab #4231	8 / Proj #199	-01				Page For I
Client Sample Number		Sample umber	Date Collected		Matrix	Date Prepared	Date Analyzed	QC Batch ID
42318-01 B4S-1	0	4-10-1309-1	10/18/04		Solid.	10/22/04	10/25/04	041025801
Comment(s):	- Results are reported							
<u>Parameter</u>	- Sample received after	er recommende <u>Result</u>	ed holding time <u>RL</u>	MDL	DF	Qual	<u>Units</u>	
TPH as Gasoline		ND	9 61	0 059	0 961		mg/kg	
Surrogates:		REC (%)	Control Limits			Qual		
1.4-Bromofluorobenzene		97	70-130				and the control property in the control of the control	
Method Blarik	099	12-009-3,408	N/A		Solid	10/25/04	10/25/04	041025B01
o _{arameter}		Result	RL	MDL	<u>DF</u>	Qual	<u>Units</u>	
'H as Gasoline		ND	10	0 061	1		mg/kg	
Surrogates:		REC (%)	<u>Control</u> Limits			Qual		
1.4-Bromofluorobenzene		84	70-130					



Analytical Report



Navy Public Works Center 2730 McKean Street, Suite 1 San Diego, CA 92136-5294 Date Received: Work Order No: Preparation: Method: 10/21/04 04-10-1309 Extraction EPA 418.1M

Project: CEL-0994&CEL-0997 / Lab #42318 / Proj #199-01

Page 1 of 1

Client Sample Num	Lab Sar Numb	per	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID	
42318-D1, B4S-1.		04-10	1309-1	10/18/04	Solid .	10/22/04	10/22/04	041022L03
Comment(s): Parameter	-Results are reported on a	a dry weight basis <u>RL</u>	MDL	<u>DF</u>	Qual	<u>Units</u>		
TRPH	28	11	4 5	1 124		mg/kg		
Method Blank		099-07	-015-726	N/A	Solid	10/22/04	10/22/04	041022L03
<u>Parameter</u>	Result	RL	MDL	<u>DF</u>	Qual	<u>Units</u>		
TRPH	ND	10	4 0	1		mg/kg		

DF - Dilution Factor .

Qual - Qualifiers



Quality Control - Duplicate



Navy Public Works Center 2730 McKean Street, Suite 1 San Diego, CA 92136-5294

Date Received: Work Order No: Preparation: Method:

10/21/04 04-10-1309 N/A **ASTM D-2216**

Project: CEL-0994&CEL-0997 / Lab #42318 / Proj #199-01

Quality Control Sample ID	Matrix	Instrument	Date Prepared:	Date Analyzed:	Duplicate Batch Number
42318-01 :B45-1	Solid	N/A	N/A	10/26/04	-, 41026MQID1
<u>Parameler</u>	Sample Conc	DUP Conc	<u>RPD</u>	RPD CL	Qualifiers
Moisture	106	10 6	0	0-25	



Quality Control - Spike/Spike Duplicate



Navy Public Works Center 2730 McKean Street, Suite 1 San Diego, CA 92136-5294 Date Received: Work Order No: Preparation: Method: 10/21/04 04-10-1309 EPA 3550B DHS LUFT

Project CEL-0994&CEL-0997 / Lab #42318 / Proj #199-01

Quality Control Sample ID	Malrix	Instrument	Date Prepare	_	Date I nalyzed	MS/MSD Balch Number
42338-D1 (B4S:1)	Solid	GC 23	10/22/0	4 1	0/22/04	D41022S04
<u>Parameter</u>	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	<u>Qualifiers</u>
TPH as Diesel	93	94	71-125	0	0-12	

RPD - Relative Percent Difference .

CL - Control Limit



Quality Control - Spike/Spike Duplicate



Navy Public Works Center 2730 McKean Street, Suite 1 San Diego, CA 92136-5294 Date Received: Work Order No: Preparation: Method: 10/21/04 04-10-1309 EPA 5035 DHS LUFT

Project CEL-0994&CEL-0997 / Lab #42318 / Proj #199-01

Quality Control Sample ID	Matrix	Instrument	Date Prepare	ed A	nalyzed	MS/MSD Batch Number	
42318-01 BAS-1	Solid	GC 22	AVN P. C. T.		10/25/04	041025501	
Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers	
TPH as Gasoline	58	37	70-130	36	0-25	3.4	

1 1 .

RPD - Relative Percent Difference CL - Control Limit



Quality Control - Spike/Spike Duplicate



Navy Public Works Center 2730 McKean Street, Suite 1 San Diego, CA 92136-5294 Date Received: Work Order No: Preparation: Method: 10/21/04 04-10-1309 Extraction EPA 418.1M

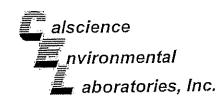
Project CEL-0994&CEL-0997 / Lab #42318 / Proj #199-01

Quality Control Sample ID	Matrix	Instrument	Dale Prepare		Date Analyzed	MS/MSD Batch Number
42318-01/ B4S-1	Solid	IR,#1	10/22/0		10/22/04	041022503
Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TRPH	98	98	55-135	1	0-30	

RPD - Relative Percent Difference .

7440 Lincoln

CL - Control Limit



Quality Control - LCS/LCS Duplicate



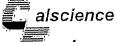
Navy Public Works Center 2730 McKean Street, Suite 1 San Diego, CA 92136-5294 Date Received: Work Order No: Preparation: Method: N/A 04-10-1309 EPA 5035 DHS LUFT

Project: CEL-0994&CEL-0997 / Lab #42318 / Proj #199-01

Quality Control Sample ID	Matrix	Matrix Instrument		Date Analyzed	LCS/LCSD Batch Number	
099-12-009-3,408	Solid	GC 22	10/25/04	10/25/04	041025BD1	
<u>Parameter</u>	LCS %RE	C LCSD %	REC %RE	CCL RPE		Qualifiers
TPH as Gasoline	108	110	70	-130 2	0-25	

RPD - Relative Percent Difference

CL - Control Limit



nvironmental Quality Control - Laboratory Control Sample aboratories, Inc.

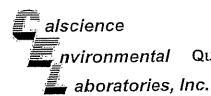


Navy Public Works Center 2730 McKean Street, Suite 1 San Diego, CA 92136-5294 Date Received: Work Order No: Preparation: Method: N/A 04-10-1309 Extraction EPA 418.1M

Project: CEL-0994&CEL-0997 / Lab #42318 / Proj #199-01

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID		LCS Batch Number	
099-07-015-726	Solid	E, IR#1	10/22/04	NONE		041022L03	
Parameter TRPH	<u>.</u>	Conc Added	Conc Recovered	LCS %Rec 104	<u>%Rec.CL</u> 70-130	Qualifiers	

74 / 744



nvironmental Quality Control - Laboratory Control Sample



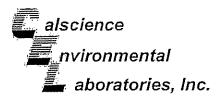
Navy Public Works Center 2730 McKean Street, Suite 1 San Diego, CA 92136-5294 Date Received: Work Order No: Preparation: Method: N/A 04-10-1309 EPA 3550B DHS LUFT

Project: CEL-0994&CEL-0997 / Lab #42318 / Proj #199-01

Quality Control Sample ID	Matrix	Instrumer	nt Date Analyzed	Lab Fil	e ID	LCS Batch Number	
098-03-002-3,816	Solid	GC 23	10/22/04	004F01	010	D41022B04	
Parameter TPH as Diesel		Conc Added	Conc Recovered 380	LCS %Rec 96	<u>%Rec CL</u> 71-119	Qualifiers	

RPD - Relative Percent Difference .

CL - Control Limit





November 09, 2004

Lyn Vasquez Navy Public Works Center 2730 McKean Street, Suite 1 San Diego, CA 92136-5294

Subject: Calscience Work Order No.: 04-11-0137

Client Reference: CEL-1007 / Lab #42397 / Proj #199-01

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 11/02/2004 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Assurance Program Manual, applicable standard operating procedures, and other related documentation. The original report of any subcontracted analysis is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Calscience Environmental Laboratories, Inc. Virendra Patel

Virendra Patel Project Manager

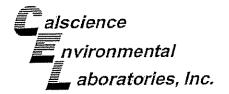
CA-ELAP ID: 1230

NELAP ID: 03220CA

CSDLAC ID: 10109

SCAQMD ID: 93LA0830

7440 Lincoln Way, Garden Grove, CA 92841-1427 • TEL:(714) 895-5494 • FAX: (714) 894-7501





Case Narrative for 04-11-0137

Sample Condition on Receipt

One soil sample was received as part of this Work Order on November 02, 2004. All samples were transferred to the laboratory in an ice-chest following strict chain-of-custody procedures. The temperature (2.2°C) of the sample was measured upon arrival in the laboratory and was within acceptable limits. The sample was logged into the Laboratory Information Management System (LIMS), given laboratory identification numbers, and stored in refrigeration units pending analysis.

The original report of any subcontracted analysis is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in it entirety.

Data Summary

The samples included in this report were analyzed in accordance with the attached chain-of custody. Data is presented on a dry weight basis.

Holding Times

All holding time requirements were met

Calibration

Frequency and control criteria for initial and continuing calibration verifications were met.

Blanks

The method blank data showed non-detectable levels for all constituents.

Matrix Spikes

Matrix Spikes (MS) and Matrix Spike Duplicates (MSD) were performed at required frequencies. All recoveries were within acceptable limits with the exception of DHS LUFT Gasoline in batch 041105S01. The affected recoveries have been flagged with a "3" gualifier.







Case Narrative for 04-11-0137

Note that the corresponding Laboratory Control Sample (LCS) and Laboratory Control Sample Duplicate (LCSD) recoveries were within control limits, indicating a matrix interference effect. Therefore, the data is released without further action or qualification.

Laboratory Control Samples

The Laboratory Control Sample (LCS) analyses were performed at the required frequencies. All recoveries were within acceptable limits.



Analytical Report



Navy Public Works Center 2730 McKean Street, Suite 1 San Diego, CA 92136-5294 Date Received: Work Order No: Preparation: Method: 11/02/04 04-11-0137 N/A ASTM D-2216

Project: CEL-1007 / Lab #42397 / Proj #199-01

Page 1 of 1

Client Sample Number		Lab Sa Num		Date Collected	Malrix	Date Prepared	Date Analyzed	QC Balch ID
42397-01 NAV-EX21		D4-11	-0137-1	11/01/04	Solid	N/A	11/05/04	411D5MOID1
<u>Parameter</u>	Result	RL	MDL	DF	Qual	<u>Units</u>		
Moisture	15 1	0 1	0 100	1		%		



ANALYTICAL REPORT



Navy Public Works Center 2730 McKean Street, Suite 1 San Diego, CA 92136-5294 Date Received: Work Order No.: Preparation:

04-11-0137 EPA 3550B DHS LUFT

11/02/2004

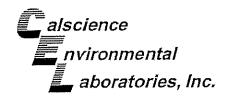
Method:

D110 L01 1

Project: CEL-1007 / Lab #42397 / Proj #199-01

Page 1 of 1

Client Sample Number	Lab Sample Number	Date Collected		Matrix	Date Prepared	Date Analyzed	QC Batch ID
42397-01 NAV-EX21	04-11-0137-1	11701704		Şölid	11/02/04	11/03/04	041102805
Comment(s):	-Results are reported on a dry weight						
<u>Parameter</u>	Result	RL	MDL	<u>DF</u>	Qual	<u>Units</u>	
TPH as Diesel	ND	11 8	5.7	1.18		mg/kg	
Surrogates:	<u>REC (%)</u>	<u>Control</u> Limits			Qual		
Decachlorobiphenyl	119	62-152					
Method Blank	098-03-002-3:837	N/A		Solid	11/02/04	11/02/04	041102805 机
<u>Parameter</u>	Result	<u>RL</u>	MDL	<u>DF</u>	Qual	<u>Units</u>	
⁻ PH as Diesel	ND	10	4 8	1		mg/kg	
Jurrogates:	<u>REC (%)</u>	Control Limits			<u>Qual</u>		
Decachlorobiphenyl	135	62-152					



ANALYTICAL REPORT



Navy Public Works Center 2730 McKean Street, Suite 1 San Diego, CA 92136-5294 Date Received: Work Order No.: Preparation: Method: 11/02/04 04-11-0137 EPA 5035 DHS LUFT

Project:

CEL-1007 / Lab #42397 / Proj #199-01

Page 1 of 1

1 TOJOUL OLLET	70, / LUD // 12001 / 1 10						. 490 . 0
Client Sample Number	Lab Sample Number	Dai Colled		Matrix	Date Prepared	Date Analyzed	QC Batch ID
42397-01 NAV-EX21	04-11-D13	7-1, 4 -3 , 3-1701	704	Solid 📲	11/03/04	=11/05/04	041105801
Comment(s):	-Results are reported on a dry	weight basis					
<u>Parameter</u>	Result	RL	MDL	<u>DF</u>	Qual	<u>Units</u>	
TPH as Gasoline	0 29	10 5	0 064	1 05	J	mg/kg	
Surrogates:	REC (%) <u>Control</u> Limits			<u>Qual</u>		
1,4-Bromofluorobenzene	105	70-130					
Method Blank	099-12-009-	,446 N/A		Solid	11/05/04	11/05/04	. 041105B01
Parameter	Result	<u>RL</u>	<u>MDL</u>	DF	<u>Qual</u>	<u>Units</u>	
ੇH as Gasoline	ND	10	0.061	1		mg/kg	
<u> Jurrogates:</u>	<u>REC (%)</u>	Control Limits			Qual		
1.4-Bromofluorobenzene	78	70-130					

RL - Reporting Limit

DF - Dilution Factor

Qual - Qualifiers



Analytical Report



Navy Public Works Center 2730 McKean Street, Suite 1 San Diego, CA 92136-5294 Date Received: Work Order No: Preparation: Method: 11/02/04 04-11-0137 Extraction EPA 418.1M

Project: CEL-1007 / Lab #42397 / Proj #199-01

Page 1 of 1

Client Sample Numb	er	Lab Sai Numb		Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
42397-01 NAV-EX		04-11-	0137-1	11/01/04	Solid"	11703/04	11/03/04	041103E04
Comment(s): Parameter	-Results are reported on a d <u>Result</u>	lry weight basis <u>RL</u>	MDL.	<u>DF</u>	Qual	<u>Unils</u>		
TRPH	92	12.0	4 8	1.178	J	mg/kg		
Method Blank		099-07	015-729	NĀ.	Solid	11/03/04	11/03/04	041103LD4
Parameter TRPH	<u>Result</u> ND	<u>RL</u> 10	<u>MDL</u> 4 0	<u>DF</u> 1	Qual	<u>Units</u> mg/kg	•	



Quality Control - Duplicate



Navy Public Works Center 2730 McKean Street, Suite 1 San Diego, CA 92136-5294 Date Received: Work Order No: Preparation: Method: 11/02/04 04-11-0137 N/A ASTM D-2216

Project: CEL-1007 / Lab #42397 / Proj #199-01

Quality Control Sample ID	Matrix	Instrument	Date Prepared:	Date Analyzed:	Duplicate Batch Number
42397-01 NAV-EX21	Solid Solid	NA Sie	N/A	11/05/04	41105MOID1
<u>Parameter</u>	Sample Conc	DUP Conc 13 7	<u>RPD</u> 10	<u>RPD CL</u> 0-25	Qualifiers
Moisture	10 1	10 /			

RPD - Relative Percent Difference
7440 Linco



Quality Control - Spike/Spike Duplicate



Navy Public Works Center 2730 McKean Street, Suite 1 San Diego, CA 92136-5294 Date Received: Work Order No: Preparation: Method: 11/02/04 04-11-0137 EPA 3550B DHS LUFT

Project CEL-1007 / Lab #42397 / Proj #199-01

Quality Control Sample ID	Matrix	Instrument	Date Prepare	ed A	Date Analyzed	MS/MSD Batch Number
42397-01 NAV-EX21	Solid	GC 23	11/02/04	i de la la la la la la la la la la la la la	11/02/04	041102805
<u>Parameter</u>	MS %REC	MSD %REC	%REC CL	<u>RPD</u>	RPD CL	Qualifiers
TPH as Diesel	115	123	71-125	7	0-12	

la .

RPD - Relative Percent Difference

CL - Control Limit



Quality Control - Spike/Spike Duplicate



Navy Public Works Center 2730 McKean Street, Suite 1 San Diego, CA 92136-5294 Date Received: Work Order No: Preparation: Method: 11/02/04 04-11-0137 EPA 5035 DHS LUFT

Project CEL-1007 / Lab #42397 / Proj #199-01

Quality Control Sample ID	, Matrix	Instrument	Dale Prepare	ed A	Date nalyzed	MS/MSD Batch Number
42397-01 NAV-EX21	Solid		, NA	5 5 6 7	1/05/04	0411105501
Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	62	46	70-130	23	0-25	3

AAAA A



Quality Control - Spike/Spike Duplicate



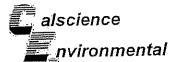
Navy Public Works Center 2730 McKean Street, Suite 1 San Diego, CA 92136-5294 Date Received: Work Order No: Preparation: Method: 11/02/04 04-11-0137 Extraction EPA 418 1M

Project CEL-1007 / Lab #42397 / Proj #199-01

Quality Control Sample ID	Matrix	Instrument	Date Prepared		Dale Analyzed	MS/MSD Batch Number
42397=01 NAV-EX21	Solid.	R#1	11/03/04		11/03/04	041103504
Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CI	Qualifiers
TRPH	105	105	55-135	0	0-30	

Muhan

RPD - Relative Percent Difference .



Quality Control - Laboratory Control Sample



Navy Public Works Center 2730 McKean Street, Suite 1 San Diego, CA 92136-5294

aboratories, Inc.

Date Received: Work Order No: Preparation: Method: N/A 04-11-0137 EPA 3550B DHS LUFT

Project: CEL-1007 / Lab #42397 / Proj #199-01

a	Matrix	Instrument	Date Analyzed	Lab File	ID L	LCS Batch Number	
Quality Control Sample ID	Solid	GC:23	11/02/04	047,F010	11	041102B05 (F)	
Parameter TPH as Diesel		Conc Added	Conc Recovered	LCS %Rec 105	<u>%Rec CL</u> 71-119	Qualifiers	

1 1 1.

RPD - Relative Percent Difference .



Quality Control - LCS/LCS Duplicate



Navy Public Works Center 2730 McKean Street, Suite 1 San Diego, CA 92136-5294 Date Received: Work Order No: Preparation: Method: N/A 04-11-0137 EPA 5035 DHS LUFT

Project: CEL-1007 / Lab #42397 / Proj #199-01

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD B Number	atch
099-12-009-3,446	Solid	GC 22	11/05/04	11/05/04	04110580	l egge en en en en en en en en en en en en en
<u>Parameter</u>	LCS %F	REC LCSD	%REC %F	REC CL RF	PD RPD.CL	Qualifiers
TPH as Gasoline	108	108	7	0-130 0	0-25	

RPD - Relative Percent Difference .

CL - Control Limit



nvironmental Quality Control - Laboratory Control Sample aboratories, Inc.



Navy Public Works Center 2730 McKean Street, Suite 1 San Diego, CA 92136-5294 Date Received: Work Order No: Preparation: Method: N/A 04-11-0137 Extraction EPA 418.1M

Project: CEL-1007 / Lab #42397 / Proj #199-01

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File	tD LC	S Batch Number
099-07-015-729	Solid	IR#1	11/03/04	NONE		041103L04
Parameter TRPH	!	Conc Added	Conc Recovered	<u>LCS %Rec</u> 103	<u>%Rec CL</u> 70-130	Qualifiers

RPD - Relative Percent Difference

APPENDIX E

APPENDIX F

Disposable En Core Sampler EXTRUSION PROCEDURES

USING THE En Core® EXTRUSION TOOL

CAUTION! Always use the Extrusion Tool to extrude soil from the En Core Sampler. If the Extrusion **Tool is not used, the Sampler may fragment, causing injury.**

- 1. Use a pliers to break locking arms on cap of En Core Sampler. <u>Do not remove cap at this time</u>. (CAUTION: Broken edges will be sharp.)
- 2. To attach En Core Sampler to En Core Extrusion Tool: Depress locking lever on Extrusion Tool and place Sampler, plunger end first, into open end of Extrusion Tool, aligning slots on coring body with pins in Extrusion Tool. Turn coring body clockwise until it locks into place. Release locking lever.
- 3. Rotate and gently push Extrusion Tool plunger knob clockwise until plunger slides over wings of coring body. (When properly positioned plunger will not rotate further.)
- 4. Hold Extrusion Tool with capped Sampler pointed upward so soil does not fall out when cap is removed. To release soil core, remove cap from Sampler and push down on plunger knob of En Core Extrusion Tool. Remove and properly dispose of En Core Sampler.

Warranty and Disclaimers

IMPORTANT: FAILURE TO USE THE EN CORE' SAMPLER IN COMPLIANCE WITH

"TTEN INSTRUCTIONS PROVIDED HEREIN VOIDS ALL EXPRESS AND

WARRANTIES, INCLUDING WARRANTY OF MERCHANTABILITY AND FITNL. JR A PARTICULAR PURPOSE.

PRINCIPLE OF USE. The En Core Sampler Cartridge System is a volumetric sampling system designed to collect, store and deliver a soil sample. The En Core Sampler comes in two sizes for sample volumes of approximately 25 or 5 grams. There are four components: the cartridge with a movable plunger; a cap with two locking arms; a T-handle (purchased separately); and an extrusion handle (purchased separately). NOTE: The En Core Sampler is designed to store soil. It is not designed to store solvent or free product.

The soil is stored in a sealed headspace-free state. The seals are achieved by three special Viton® * o-rings, two located on the plunger and one on the cap of the Sampler. At no time and under no condition should these o-rings be removed or disturbed.

QUALITY CONTROL. The cartridge is sealed in an airtight package to prevent contamination prior to use. Due to the stringent quality control requirements associated with the use of this system, the disposable cartridge is designed to be used only once.

WARRANTY. En Novative Technologies, Inc. ("En Novative Technologies") warrants that the En Core Sampler shall perform consistent with the research conducted under En Novative Technologies' approval, within thirty (30) days from the date of delivery, provided that the Customer gives En Novative Technologies prompt notice of any defect or failure to perform and satisfactory proof thereof. THIS WARRANTY DOES NOT APPLY TO THE FOLLOWING, AS SOLELY DETERMINED BY EN NOVATIVE TECHNOLOGIES: (a) Damage caused by accident, abuse, mishandling or dropping; (b)Samplers that have been opened, taken apart or mishandled; (c)Samplers not used in accordance with the directions; and (d)Damages exceeding the cost of the sampler. Seller warrants that all En Core Samplers shall be free from defects in title THE FORE-GTT'G WARRANTIES ARE IN LIEU OF ALL OTHER WARRANTIES, WHETHER ORAL, V EXPRESSED, IMPLIED OR STATUTORY, INCLUDING ANY INFORMATION DISPLAYED BY SALES REPRESENTATIVES OR IN MARKETING LITERATURE IMPLIED WARRANTIES OF FITNESS AND MERCHANTABILITY SHALL NOT APPLY. En

WANDERNTIES OF FITNESS AND MERCHANTABILITY SHALL NOT APPLY. En Novative Technologies' warranty obligations and Customer's remedies, except as to title, are solely and exclusively as stated herein.

LIMITATION OF LIABILITY. IN NO EVENT SHALL EN NOVATIVE TECHNOLOGIES

BE LIABLE FOR ANTICIPATED PROFITS, INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES, INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF REVENUE, DOWN TIME, REMEDIATION ACTIVITIES, REMOBILIZATION OR RESAMPLING, COST OF CAPITAL, SERVICE INTERRUPTION OR FAILURE OF SUPPLY, LIABILITY OF CUSTOMER TO A THIRD PARTY, OR FOR LABOR, OVERHEAD, TRANSPORTATION, SUBSTITUTE SUPPLY SOURCES OR ANY OTHER EXPENSE, DAMAGE OR LOSS, INCLUDING PERSONAL INJURY OR PROPERTY DAMAGE. En Novative Technologies' liability on any claim of any kind shall be replacement of the En Core Sampler or refund of the purchase price. En Novative Technologies shall not be liable for penalties of any description whatsoever. In the event the En Core Sampler will be utilized by Customer on behalf of a third party, such third party shall not occupy the position of a third-party beneficiary of the obligation or warranty provided by En Novative Technologies, and no such third party shall have the right to enforce same. All claims must be brought within one (1) year of shipment, regardless of their nature.



En Novative Technologies, Inc.

1241 Bellevue Street Green Bay, WI 54302 Phone: 920-465-3960 • Fax: 920-465-3963 Toll Free: 888-411-0757 www.ennovativetech.com

The En Core® Sampler is covered by One or More of the Following U.S. Patents: 5,343,771; 5,505,098; 5,517,868; 5,522,271. Other U.S. and Foreign Patents Pending.

* Viton® is a registered trademark of DuPont Dow Elastomers

Disposable En Core Sampler



En Novative Technologies, Inc.

1241 Bellevue Street Green Bay, WI 54302 Phone: 920-465-3960 • Fax: 920-465-3963

Toll Free: 888-411-0757 www.ennovativetech.com

NOTE:

- 1. En Core® Sampler is a SINGLE USE device. It cannot be cleaned and/or reused.
- 2. En Core® Sampler is designed to store soil. Do not use En Core Sampler to store solvent or free product!
- 3. En Core® Sampler must be used with En Core® T-Handle and/or En Core® Extrusion Tool exclusively. (These items are sold separately.)

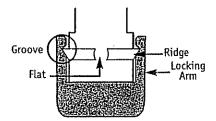
Sampling Procedures

Using The En Core® T-Handle

En Core® T-Handle En Core® Top Plunger End Small O-Ring Plunger Rod Wing Tab Locking Viewing Hole for 25 Slot Lever Gram Sampler Viewing Hole for 5 👞 Ridge Gram Sampler Locking Pins Flat (inside) - CORING BODY Tah Wina **Bottom** Plunger Bottom(inside)

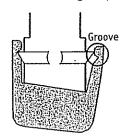
Sampler Correctly Capped

(Locking arm grooves seated over coring body ridge)



Sampler Incorrectly Capped

(Cap appears crooked; locking arm grooves not fully seated over coring body ridge)



BEFORE TAKING SAMPLE:

- 1. Hold coring body and push plunger rod down until small o-ring rests against tabs. This will assure that plunger moves freely.
- 2. Depress locking lever on En Core T-Handle. Place coring body, plunger end first, into open end of T-Handle, aligning the (2) slots on the coring body with the (2) locking pins in the T-Handle. Twist coring body clockwise to lock pins in slots. Check to ensure Sampler is locked in place. Sampler is ready for use.

TAKING SAMPLE:

Turn T-Handle with T-up and coring body down. This positions er bottom flush with bottom of coring body (ensure that ger bottom is in position). Using T-Handle, push Sampler into soil until coring body is completely full. When full, small o-ring will be centered in T-Handle viewing hole. Remove Sampler from soil. Wipe excess soil from coring body exterior

4. Cap coring body while it is still on T-handle. <u>Push</u> cap over flat area of ridge <u>and twist</u> to lock cap in place. CAP MUST BE SEATED TO SEAL SAMPLER (see diagram).

PREPARING SAMPLER FOR SHIPMENT:

- 5. Remove the capped Sampler by depressing locking lever on T-Handle while twisting and pulling Sampler from T-Handle.
- 6. Lock plunger by rotating extended plunger rod fully counterclockwise until wings rest firmly against tabs (see plunger diagram).
- 7. Attach completed tear-off label (from En Core Sampler bag) to cap on coring body
- 8. Return full En Core Sampler to zipper bag Seal bag and put on ice.



DATE: February 7, 2005

Case Closure Summary

UNDERGROUND STORAGE TANK (UST) PROGRAM

CASE INFORMATION

Site Name: UST 41319 (Ramp 41319)
Site Address: 41 Area, Marine Corps Base Camp Pendleton, California

Responsible Party Name: United States Marine Corps | RP Phone Number: Ms. Tracy Sahagun 760.725.9774

Responsible Party Address: AC/S ES, Marine Corps Base Box 555008, Camp Pendleton, CA 92055-5008

Current Land Use: Vehicle Staging Area

RWQCB File Number: 9UT2903 Local Case Number: N/A RWQCB Staff: P. Peuron

Basin Number: 3.10/3.11 Basin Uses: Municipal, Agricultural, and Industrial

II. RELEASE AND SITE CHARACTERIZATION INFORMATION

Description of the unauthorized release (cause, release date, source[s]):

UST 41319 consisted of one 2000 gallon UST used to store waste oil adjacent to Ramp 41319, a vehicle grease rack (decommissioned). The UST was removed in 1994. During site assessment activities in 1999 and 2000, Eighteen vertical soil borings were advanced to depths of up to 50 feet bgs in the vicinity of the former UST. An attempt was made to collect a groundwater sample from a temporary well installed in a boring located in the former tank cavity. Groundwater was not observed in the temporary well after a 28-day period. Based on the findings from the environmental investigations, it was determined that a release from the UST impacted soil at the site. The release date is unknown.

Description of the soil/geology: Quaternary aged Older Alluvium. Sand, silt, clayey silt, and several feet of fill.

Is soil contamination completely delineated (to what levels)? Yes, < 100 mg/kg TPHd

Area extent? Approximately 60 feet x 40 feet

Vertical extent? 5.0 feet below ground surface

Est. Volume of contaminated soil left on site and concentration: < 14 cubic yards with TRPH ≥1,000 mg/kg below block retaining wall near sample point 41319-EX-11.

Is groundwater contamination completely delineated (to what levels)? Groundwater was not encountered at this site.

Monitoring wells installed, properly permitted? N/A

Depth to groundwater: N/A

Groundwater flow direction: N/A

Number of monitoring wells: N/A

Seasonal or tidal fluctuation: N/A

Gradient: N/A

Is groundwater or surface water impacted? No

Is groundwater contamination contained on site? N/A

Nearest receptor (Inland Surface Water, Bay, Drinking Water Wells, etc.):

Unnamed ephemeral stream approximately 500 feet south east of the site.

III. MAXIMUM DOCUMENTED CONTAMINANT CONCENTRATION

Contaminant	Soil (mg/kg) initial	Soil (mg/kg) current	Water (ug/l) initial	Water (ug/l) current
ı RPH	60,000	<1,000	Not Analyzed	Not Analyzed
TPH-d	3,600	<100	Not Analyzed	Not Analyzed
TPH-g	300	<10	Not Analyzed	Not Analyzed

IV. TREATMENT AND DISPOSAL OF AFFECTED MATERIAL

Amount (include units)	Action (treatment or disposal)	Concentration	Date
211 yds ³	Disposal	≤ 49,000 (TRPH)	11/8/2004
			Amount (mende units)

CLOSURE

(Senior Staff Name)

Does completed corrective action protect b	eneficial uses per the RWQCB Basin	Plan? Yes
Should corrective action be reviewed if lan		
Monitoring wells decommissioned? N/A	Number decommissioned: N/A	Number retained: N/A
Enforcement actions taken: None		
Enforcement actions rescinded: None		
VI. Signature of Reviewer	Date	
(Staff Name)		
VII. Signature of Senior Staff		
	Date	clossum ust - 10/95